BUYING WOOD & BUILDING FARMS

Marketing Lumber and Farm Building Designs on the Canadian Prairies 1880 to 1920

G.E. Mills

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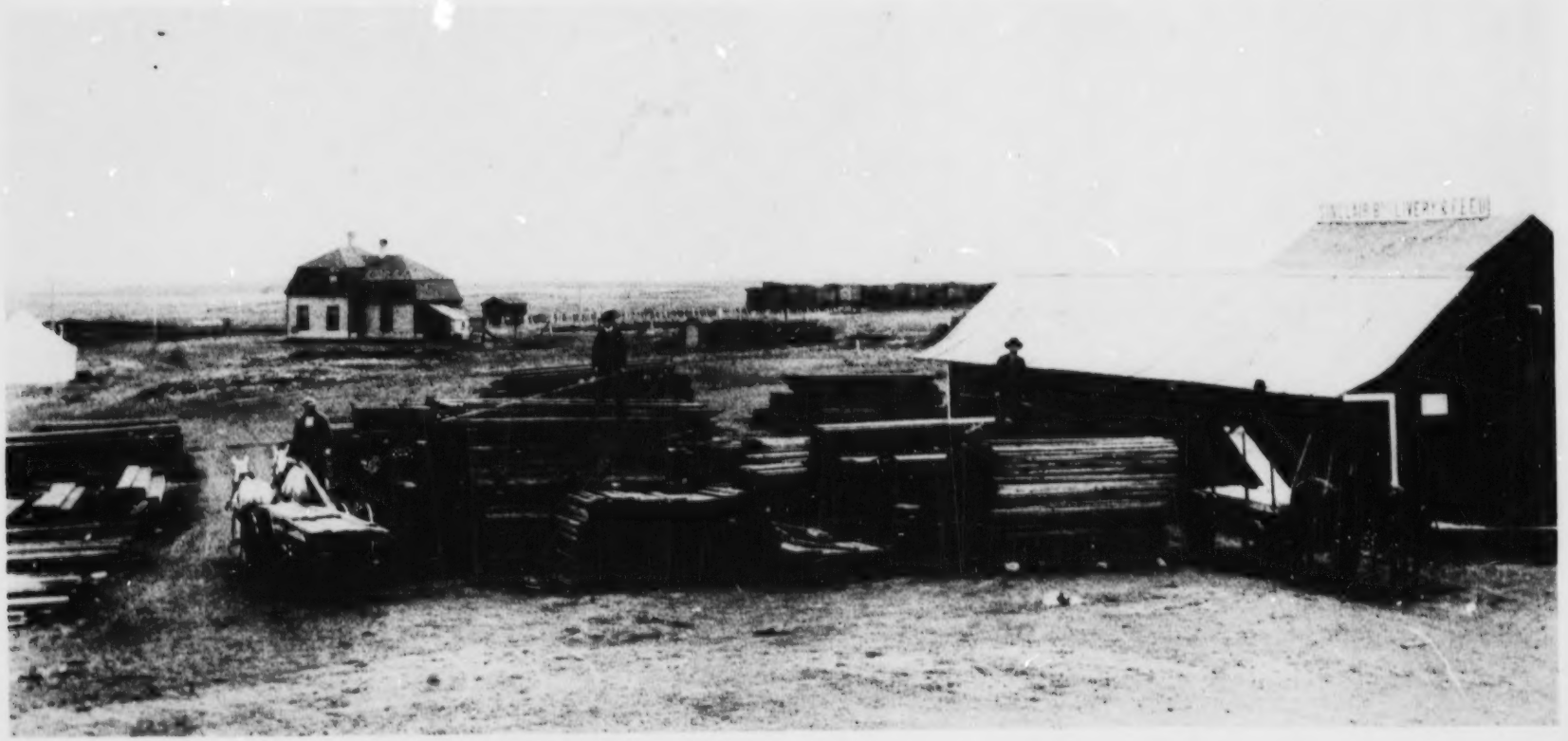

Frontispiece: An independent lumberyard cum feedstore and livery barn at Macoun, Saskatchewan, ca. 1904.
Saskatchewan Archives Board, Photograph No. R-A10,041

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Studies in Archaeology, Architecture and History

National Historic Sites
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Front cover: Ernest Dodd with a load of lumber for his farmhouse south of Byemoor, Alberta, 1911.
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Back cover: Lee Butler building his house near Vauxhall, Alberta, April 1921.
Glenbow Archives, Calgary, P.F.R.A. Collection, NA-4800-17

Contents

7 Acknowledgments

9 Introduction

Part I
The Prairie Lumber Trade

13 The Lumber Trade Organizes

21 Growth and Speculation: Selling Lumber during the Settlement Boom

33 Collapse and Resurgence: Responses to a Changing Market

Part II
The Market for Wood and Buildings

41 The Need for Shelter

51 The Industry's Responses: Buildings by Rail

71 Alternatives: Published Plans and Locally Bought Lumber

87 Mass Marketing's Impact on Prairie Farm Buildings

Part III
A Survey of Pre-1920 Houses, Barns, and Outbuildings

91 Introduction

93 Preliminary Dwellings

101 One-Storey Cottages and Houses

113 Bungalows

123 Gable-Roofed Houses

135 Square Houses

145 Gambrel-Roofed Houses

153 Barns

169 Granaries and Implement Sheds

177 Appendix A. Census Data on Prairie Farm Buildings.

181 Appendix B. Wooden Farmhouses and Barns Recorded on the Prairies by the Canadian Inventory of Historic Building and Grouped by Storeys and Roof Shapes.

183 Appendix C. Major Lineyard Firms in Western Canada in 1914.

185 Endnotes

191 Bibliography

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G.E. Mills, Architectural History Branch, Canadian Parks Service, Environment Canada, 1985.

Introduction

The transformation of the Canadian Prairies into one of the world's major wheat-producing areas occurred within a span of 40 years. Between 1880 and 1920, three transcontinental railways opened the region up to farming, bringing in settlers and taking out their crops. By 1920 over 250 000 farms were in operation in Manitoba, Saskatchewan, and Alberta. These farms created a vast market for goods and services. Paramount among the commodities transported into the region was milled limber, which the vast majority of settlers required for building purposes.

Unlike pioneers of earlier Canadian frontiers, the majority of Prairie settlers had to purchase most, if not all, materials needed to build durable dwellings and outbuildings. This situation intensified after the turn of the century as the volume of settlement grew from a trickle into a flood and settlers poured into the open and largely treeless plains. The Prairies' rapidly growing appetite for lumber in turn spawned a massive, externally based lumber industry. This industry exerted a pervasive influence on farm building practice in the Prairies through its various efforts to regulate the trade.

Between 1880 and 1920, farmers' need for compact low-cost houses and other farm buildings was addressed in a variety of ways. The nature and relative success or failure of these responses were closely related to the dynamics of the lumber industry. Before 1910 the options available to settlers were limited by a highly regulated re'ail-lumber network and the absence of knowledgeable sources of design and construction information. The situation abruptly changed after 1910 with the introduction of mail-order marketing and plan books that catered specifically to Prairie farm needs. Both were directly patterned upon recently developed American models, as were many of the designs that suddenly became available. The close association of both building models and marketing techniques corresponded with the large flow of American settlers into the region, as well as the increasing American domination of the Prairie lumber trade after 1900. However, this influx of people, capital, and ideas did not result in simple replication of farm models from south of the border. Prevailing economic conditions on the Canadian Prairies produced different results.

This study examines the factors that influenced the types of buildings most settlers built during this formative phase — the decades from 1880 to 1920 — in the growth of the Canadian Prairies, a phase when the region's buildings were characterised by an overwhelming predominance of milled lumber and by the repetition of simple, often austere, shapes and designs.

Part I examines the nature of the Prairie lumber trade and its influence on farm buildings. Part II describes the various types of mass-produced building systems, plan publications, and marketing methods that appeared on the Prairies during those decades. And Part III consists of a survey of published plans and built examples of pre-1920 farmhouses, barns, and selected outbuildings, grouped according to prevalent roof types and layouts to illustrate the influences exerted by plan books and mail-order-building manufacturers.

Part I
The Prairie Lumber Trade

To The Prairie Farmer.

The main market for Western lumber to-day is in the Prairie Provinces of Canada. Each farm is, after all, a factory for agricultural produce and needs a well-built plant like any other factory. This means good buildings — a comfortable, convenient house, good barns, granaries, silos, fences and shelter for machinery. The best material for this is wood.... British Columbia therefore desires to give the citizens of Alberta, Saskatchewan and Manitoba full information concerning her forest products, asking them to bear in mind that these products are "grown and manufactured in Canada", and that trade between the Provinces of the Canadian West is the surest foundation for our common prosperity.

British Columbia Department of Lands, Forest Service, *British Columbia Timber for Prairie Farms*, Farm Buildings Series

The Lumber Trade Organizes

One of the major by-products of the settlement of the Canadian prairies was the growth of a vast lumber industry geared primarily to supplying the needs of rural settlers there. The lumber industry developed from an infancy that began in the 1870s and 1880s, continued through a wildly expanding adolescence that corresponded to the settlement boom years between 1900 and 1913, and reached a stable maturity around 1920, by which time the Prairies' agricultural economy had become firmly based on wheat exports.

The nature of the Prairie lumber trade varied considerably during the three periods. Prior to 1900 the demand for externally produced lumber was relatively low: the rate of settlement was slow and tended to be concentrated in river valleys and other areas where native timber was available. The intensification of settlement on the open plains after the turn of the century created a dependence on external sources of building materials and sparked the boom that lumbermen had long awaited. But the market proved volatile. Although the demand for lumber accelerated, uncontrolled expansion of milling facilities and a continuous flow of low-grade lumber from across the U.S. border had an unsettling effect on the industry, with mixed consequences for the consumer. Low-priced American lumber triggered occasional price wars in which Canadian manufacturers were at a distinct disadvantage, encouraging them at an early date (1891) to establish a strong retail trade association in an effort to regulate prices. For the most part, lumber was abundantly available throughout the region. Consumers' options were between low-grade material milled locally or in the U.S., or higher quality British Columbia or Ontario lumber sold at considerably greater cost.

The lumber industry soon became divided into three distinct sectors: manufacturers who milled lumber and shingles from raw logs; wholesalers who functioned as brokers, financiers, and middlemen; and local retailers who sold directly to the public. The relationship between the three sectors fluctuated considerably as a result of changes in the marketplace and shifts of power within the industry itself.

Increasingly, Prairie homesteaders' options in terms of the lumber products they could buy were dictated by the nature of the industry, particularly at the retail level, where first a strong trade association and then various lineyard monopolies attempted to control prices, mould demand, and regulate competition. (Lineyards, also known as chain yards, were chains of retail lumberyards owned and controlled by single parent companies. They first appeared in Alberta around 1903, when several mill owners opened a succession of retail outlets to market their products. Within a few years lumber sales throughout the region were dominated by large lumber companies with dozens of, and in a few cases well over a hundred, local retail outlets.)

Before 1920, Prairie lumber came from four distinct sources: mills scattered across the Canadian Prairies; American mills concentrated in the upper Mississippi Valley region of Minnesota and Wisconsin, and after the turn of the century, in the states of Washington and Oregon; pine mills in western Ontario, primarily in the Lake of the Woods district; and the coastal and interior mills of British Columbia.

Before the Canadian Pacific Railway reached Winnipeg in 1883, the limited lumber needs of the settled areas of Manitoba and the Northwest Territories were met largely by small local mills. The earliest commercial mills were located at Winnipeg and along the Red River during the 1870s; by the early 1880s, mills had been established in other centres as far west as Calgary and Edmonton. Since most settlers were then going to areas where native timber was available for log construction, demands for commercially milled lumber remained comparatively low throughout the 1880s; the majority of settlers could keep their building costs to a minimum by using local logs and purchasing only such items as sashes, mouldings, flooring, and shingles.

Spruce was the principal native wood available for construction purposes, with a broad belt of large stands running along the northern fringes of settlement from Hudson's Bay west to the Rockies, as well as in pockets such as Moose Mountain and the Cypress Hills. The native spruce, smaller than imported pine or fir, was primarily used for common or low-grade lumber. It was supplemented by limited quantities of tamarack, oak, and poplar in areas where these species were available in marketable size and quantity.[1] In most southern areas the spruce supply was exhausted by the turn of the century. In northern regions, though large-scale milling continued throughout the settlement boom, the northern mills' proportional share of the Prairie market dropped as competition from Ontario, American, and B.C. mills increased.[2]

The first attempts by non-prairie manufacturers to tap the Canadian Prairie market were made by Minnesotan mills in the late 1870s. This was not surprising given the extensive trading ties that had been established between Winnipeg and St. Paul during the decade prior to completion of the CPR link with the East.[3] During this period, lumber reached Winnipeg by way of large rafts, called flatboats, that were assembled at Moorhead, on the Minnesota-Dakota border, and then floated down the Red River to Winnipeg. River trade was superceded by rail transportation when a railway connected St. Paul and Winnipeg in 1878, and Minnesotan mills enjoyed a brief monopoly on lumber exports into Manitoba.[4]

The presence of American lumber on the Prairies became a contentious issue when Canadian manufacturers entered the trade after the CPR was completed. The Americans used Canada as a dumping ground for their excess production, and this practice increased after 1894 when the Canadian government permitted free import of rough lumber and lumber planed on one side only.[5] From then on, low-grade American lumber became a significant factor in the trade, accounting for eight to ten per cent of the total Prairie lumber sales between 1901 and 1905.[6]

As the pine forests of the upper Mississippi Valley became depleted during the 1900s, American operations shifted westward to Oregon and Washington. American mill production accelerated, and the Canadian Prairies received increasing quantities of low-grade fir and cedar lumber, lathing, and shingles that the domestic American market could not absorb, culminating in the peak year of 1911 when American imports accounted for approximately 20 per cent of lumber consumed by the Prairies.[7] This intensified dumping proved temporary. American exports fell off dramatically after 1912 as U.S. domestic demand increased.

One of the most important and enduring consequences of the exhaustion of Minnesota timber was the relocation of many of its lumbermen and their financial resources into western Canada, where they quickly assumed dominant roles in both the manufacturing and retailing sectors of the trade after 1900. This was particularly evident in B.C. where by 1910 the majority of mills were controlled by foreign interests, primarily from the U.S. American investment in B.C. mills climbed from $2 million in 1900 to $65 million in 1910. By 1914 it had reached $70 million.[8] In the retail sector it encouraged the adoption of American practices, notably the establishment of lineyard chains, and the use of advertising campaigns.

The pine region around Lake of the Woods in western Ontario was opened to lumbering when the CPR line reached Winnipeg in 1883. Several mills were established at Rat Portage, Keewatin, and Norman along the CPR main line by eastern Canadian and Winnipeg lumbermen during the 1880s. These mills quickly gained a major proportion of the lumber trade in Manitoba and the territories as far west as Regina. Seven mills were operating at the three sites by 1891.[9] A lull in lumber sales subsequently forced a series of mergers, and by 1895 two large firms, the Rat Portage Lumber Company and the Keewatin Lumber Company, controlled all production in the area.[10] In 1902 the Rat Portage Lumber Company alone accounted for more than one-third of Manitoba's lumber supplies. The combined production of the two western Ontario mills approached two-thirds of Manitoba's lumber supplies by 1902.[11] After 1905 the western Ontario mills' overall share of the market began to decline, partly due to increasing American and B.C. competition and also to depletion of the pine. Yet the Rat Portage Lumber Company managed not only to survive, but also to maintain its stature as one of the largest lumber companies in the West by continually diversifying both its sources of material and its operations. By 1898 it operated four mills in western Ontario plus a sash and door factory in Winnipeg. In the following decade it expanded its timber ranges into the northern Ontario spruce belt and it opened mills in B.C. as well as a large saw and planing mill in Winnipeg.[12]

Their proximity gave the western Ontario pine mills a strong advantage in the Manitoba and Saskatchewan markets, particularly during the

1890s and 1900s when they benefited from freight rates lower than those their B.C. counterparts had to pay. Their products included a wide range of rough and finished lumber, exterior and interior siding, flooring, lathing, and mouldings, as well as shingles, which directly competed with B.C. products.[13]

The fourth major source of lumber for the Prairies was B.C., which actually consisted of two distinct regions: the coastal mills on the lower mainland and Vancouver Island, and the interior mills throughout the southeast of the province but heavily concentrated along the CPR line from the Crow's Nest Pass to Revelstoke.

The coastal industry predated the completion of the CPR line to the coast in 1885 and was initially geared entirely to export shipping. While a few attempts were made to enter the Prairie trade during the 1880s, coastal mills were placed at a disadvantage by high freight rates, particularly to Manitoba and the eastern territories, that effectively eliminated them from the market for common-grade lumber. They did, however, enjoy growing sales of finished siding, flooring, and shingles by the mid-1890s, when B.C. cedar shingles became generally accepted throughout the Prairies due to their superiority over pine shingles.[14] After 1900 the Prairies quickly replaced the export trade as the principal market for coastal mills' products.[15] Increasing production capacities coupled with the growing demand for the coast's high-grade products compensated for the higher shipping costs.

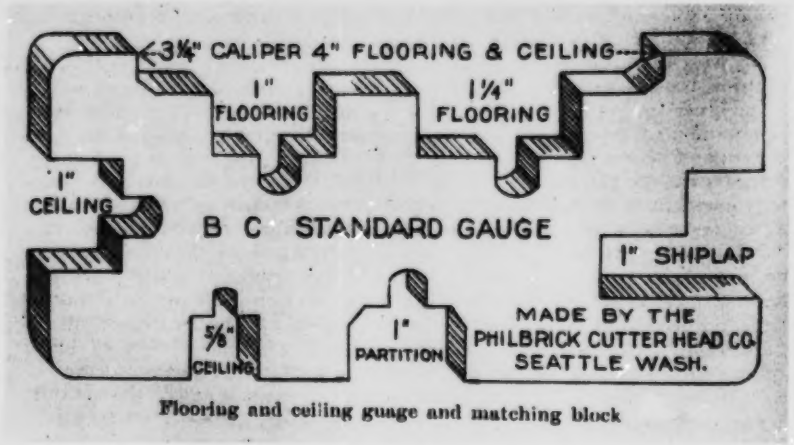
Construction of the CPR branch line through the Crow's Nest Pass during the late 1890s opened up vast timber stands in the Kootenays. Numerous mills were established in the following decade specifically for the Prairie trade. Their proximity to the Prairies gave them an initial advantage over coastal mills, and they quickly gained a large proportion of the trade, particularly in Alberta. The Kootenay lumber industry was subject to intense speculative growth during the settlement boom and had over a hundred mills in operation by the peak year of 1913, but this rapid expansion was based on an assumption of a continually expanding Prairie demand. Periodic drops in demand or the dumping of lower-priced American lumber had calamitous effects on the industry here, and price wars, in which undercapitalized interior mills dropped their prices below the cost of production, destabilized the entire industry.

Financial failures, mill closures, and chronic overcutting were all characteristics of the B.C. lumber industry before 1914. Ultimately this turbulence had negative effects on the Prairie farm trade, where retail lumber costs hovered at the highest level in the country regardless of occasional market fluctuations. Yet despite this turbulence, B.C. became the principal supplier of wood building products to the Prairies during the 1900s. The range of tree species used by B.C. mills expanded as the prairie trade grew: by 1910 cedar, fir, spruce, hemlock, and pine were being shipped eastward in large quantities. By 1911 the province's 225 mills shipped 764 000 000 board feet of lumber to Alberta, Saskatchewan, and Manitoba.[16] This was more than half of the prairies' total consumption for that year. B.C.'s production continued to climb, cresting at well over a billion board feet in 1913, between 70 and 80 per cent of which was consumed by the Prairie market (*see* Appendix A, Table 5).[17] By that date B.C. lumber products were being distributed throughout the Prairies although shipping costs continued to make the marketing of low and common grades of lumber harder in the eastern districts during the peak years of American dumping.

The continually increasing production capacities of the various western lumber milling centres ensured that the Prairies were rarely without sufficient building materials during the settlement period. During the boom years the demand absorbed all available supplies, the volume of sales being restricted only by the limited capacity of the railway. In the recessions of the mid-1890s, 1907–08, and 1913–15, demand abruptly fell off, leaving the mills with huge inventories of unsold lumber.

The predominant demand during the boom years of settlement was for rough and common grades of dimension lumber (boards cut to standardized sizes, such as 1-x-6s, 2-x-4s, and 2-x-6s), siding, and shingles — the materials required for basic low-cost construction. The demand for higher-grade materials gradually increased as settlers became better established and began to construct permanent houses and outbuildings. A wide variety of milled lumber products became available through Winnipeg-based wholesalers at an early date: by 1888 dimension lumber was being sold in sizes ranging from 2 x 4 inches to 8 x 8 inches and in lengths exceeding 24 feet, and various grades of siding, flooring, and shiplap were also available, along with lathing, mouldings, shingles, and "common stock."[18] A decade later the range of dimensions had expanded somewhat, and most products were offered in spruce, pine, and fir, reflecting the growing availability of B.C. lumber.[19]

1 The Columbia River Lumber Company sawmill at Golden, B.C., was one of many mills established to meet the seemingly endless demand for lumber on the Prairies before 1913.
Provincial Archives of British Columbia, Catalogue No. HP73487



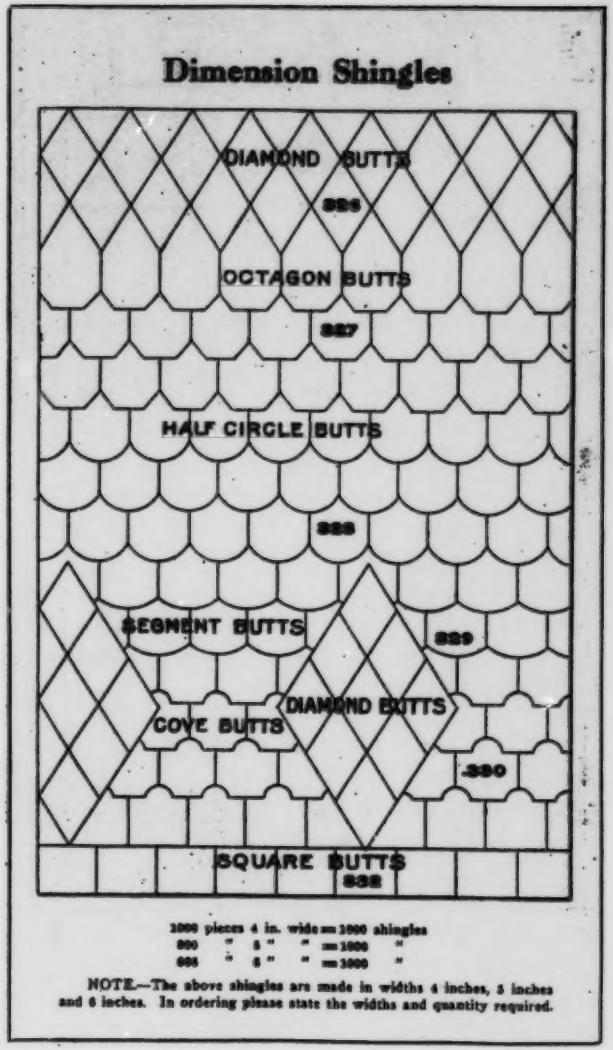
Flooring and ceiling guage and matching block

2 The standard lumber gauge introduced by the B.C. lumber and shingle manufacturers in 1910.
"Standardization of Finished Sizes in Lumber," *Western Lumberman*, Vol. 8, No. 7 (July 1911), p. 80

Prior to 1906 the shapes and dimensions of siding, mouldings, sashes, and other finished lumber products varied from producer to producer. Lack of standardization reflected the general lack of organization within the manufacturing sector of the industry. Moreover, many mills resisted standardization because unique sizes and patterns locked clients into continuing trade. As one lumberman reflected in 1911,

> It was then the rule for the machine man at every mill to demonstrate his originality and fertility of invention by turning out flooring, shiplap and other lines that would match the product of no other mill. The success achieved along this line tended to steady custom, because once a buyer accepted the product of a mill he had to keep purchasing there.[20]

Attempts to standardize products accompanied the establishment of trade associations. Kootenay manufacturers took steps to implement standard sizes and moulding patterns in 1905, but apparently with limited success. In the following year the B.C. Lumber and Shingle Manufac-


Dimension Shingles
DIAMOND BUTTS
OCTAGON BUTTS
HALF CIRCLE BUTTS
SEGMENT BUTTS
COVE BUTTS
DIAMOND BUTTS
SQUARE BUTTS
NOTE.—The above shingles are made in widths 4 inches, 5 inches and 6 inches. In ordering please state the widths and quantity required.

3 Dimension shingles offered in the B.C. lumber and shingle manufacturers' *B.C. Standard Catalogue of Sash, Doors, Mouldings and Other Interior and Interior Finish ... 1914*.
British Columbia Legislative Library

turers' Association, composed of most coastal manufacturers, published a catalogue of standardized sashes, mouldings, and doors,[21] but its attempt also failed, largely due to the continuing lack of cohesiveness within the industry. The association revived its standardization program in 1910, introducing standard gauges to its members:

> Suitable gauges were decided upon as best adapted to British Columbia conditions and the demands of the prairie trade, following which the mills belonging to the Coast Association began manufacturing under the new conditions.... the new order of things is heartily welcomed by the prairie buyers and local contractors, who are not now tied down to any particular plant — they can place orders for any kind of stock desired with a dozen mills in the full assurance that when delivered the stuff will match up as perfectly as it would do if all of it came from one machine.[22]

In 1910 the association appointed a grading inspector to enforce its standards, but not until 1914 did it publish a catalogue of standardized sashes, doors, mouldings, shingles, and lumber for retailers and wholesalers throughout western Canada.

Standardization of the B.C. products had significant implications for both the industry and the consumer. By making products interchangeable, it curbed attempts to tie purchasers to a single manufacturer. It also paved the way for increasing standardization in building design, a trend that led to the proliferation of free building-plan campaigns launched by both the lumber industry and government agencies around 1915. Since B.C. manufacturers then accounted for well over half the Prairie lumber supply, producers from other regions came under strong pressure to match the B.C. dimensions and patterns.

During the 1880s and 1890s, farmers and new homesteaders could purchase lumber directly from the mills or from local merchants, who often carried building supplies along with other lines such as fuel, farm implements, and dry goods. Increasingly the retail sale of lumber became a specialized business in its own right, with small lumberyards opening up in most towns and villages to supply the growing demand. Initially dealers ordered directly from manufacturers. The record books of Valentine Winkler, who ran a lumber business at Morden, Manitoba, from 1885 to 1899, reveal small dealers' diverse sources then. Winkler's supplies ranged from common lumber, lathing, and shingles from western Ontario manufacturers to low-grade stock from the Minnesota and Ontario Lumber Company, and infrequently included high-grade siding from the Brunette sawmill on the West Coast.[23]

As the number of retailers grew during the 1890s, direct contact between them and the manufacturers diminished. Arrangements for supplies were increasingly made by travelling agents for Winnipeg-based wholesalers who acted as brokers, taking orders and contacting mills in various regions to obtain the best prices. The Winnipeg wholesalers also made bulk purchases from manufacturers for resale to either retailers or, in the case of unfinished lumber, local planing mills. Winnipeg consequently became the major lumber distribution centre on the Prairies, and most large manufacturers established agents there to do business with the wholesalers.

The retail trade quickly developed a cohesiveness that was initially lacking in the manufacturing sector. By 1890 a group of Winnipeg dealers had founded the Western Retail Lumbermen's Association (WRLA) and began recruiting members throughout Manitoba and Assiniboia.[24] (The inception of the WRLA coincided with similar movements in the American Midwest, where lumber manufacturers had already begun organizing in order to standardize prices and lumber sizes as well as to improve their bargaining power with railways over freight rates.) The WRLA also admitted lumber manufacturers and wholesalers as honorary members. The association's primary aim was to restrict competition within specific areas and confine trade wherever possible to its affiliates. This was succinctly, if unsympathetically, described in *The Nor'-West Farmer*, a leading agricultural journal of the period:

> The association ... has a list of rules and regulations which, when boiled down to a solid residium, make it impossible for a man in Western Canada to buy an article in manufacturered lumber from any man but one or two in each town that the association approves of ... this Retail Lumber Dealers' Association embraces practically every lumber merchant between Lake Superior and the Rockies. It decides just how many retailers there shall be at every place, and prohibits under special penalties a man at say, Austin, underselling the dealer at MacGregor. The mill owners and manufacturers are members also, with a nominal difference in terms of membership.[25]

The WRLA's success at regulating prices and restricting competition depended on its ability to recruit the majority of Prairie retailers. By

1894 its 145 members included, it claimed, nearly all retailers in Manitoba and Assiniboia as far west as Indian Head (an area corresponding to present-day southern Manitoba and southern Saskatchewan). It also had 20 manufacturers and wholesalers as honorary members.[26] By 1900 it had 188 retail members and 27 honorary members, which, its secretary boasted, placed it in "a unique position among similar organizations on the continent, having over 90% of the dealers within its territory as members."[27] In 1903 the WRLA expanded into Alberta, establishing the Alberta Retail Lumbermen's Association, a subsidiary that enabled the WRLA to deal more effectively with the distinctive organizational problems of Alberta, where a large number of nonaffiliates were well-established.[28] By 1903 WRLA membership had climbed to 343 retailers and 63 honorary members.[29]

The increase in honorary members reflected the WRLA's additional role as lobbyist for lower freight rates on the CPR and for tariff protection against American lumber. Between 1894 and 1905 the association waged campaigns over both issues. Although it succeeded in getting the CPR to lower its rates to the level charged by rival American transcontinental lines in 1895, its attempts to block the free entry of American lumber were less successful. Repeated lobbying found little sympathy in Ottawa, particularly after the 1896 election of the Laurier government and Clifford Sifton's appointment as minister of the Interior. As the architect of the Dominion government's massive campaign to promote western settlement and as the member of Parliament for Brandon, Manitoba, Sifton was unsympathetic towards tariffs that would drive up the cost of building materials and antagonize western farmers.[30] The WRLA's only recourse was to ban the sale of American lumber by its members except at border points where dealers were in direct competition with nonmembers.

The association's attempts to block American lumber inevitably provoked the hostility of farm spokesmen, who cited its efforts as evidence of its intent to manipulate the market regardless of the consequences for farmers. *The Nor'-West Farmer* presented this view of the tariff issue in November 1903:

> It is quite safe to state that it will be somewhat difficult to find any western farmer or rancher who has been able to purchase any of the "refuse material" which is said to be "dumped" in Manitoba and the Territories by unscrupulous American manufacturers. At least, if any has been on the market, the buyers have paid about twice the price of good lumber for it.... The agitation is simply an attempt to have high protective duties imposed upon lumber and shingles in order that the lumbermen may still further put the screws on the western consumer. The lumbermen have clearly shown that they are unworthy of being entrusted with a weapon as dangerous as a high tariff. They stand convicted before the public as a set of opportunists of the most objectionable class.[31]

Similar sentiments were expressed in local newspapers across the Prairies.

Lumber shortages and corresponding price increases inevitably led to increased outcries against the lumber industry in general and the WRLA in particular. Since the growing complaints threatened the success of its settlement programs, the CPR entered the fray in 1904 as a champion of settlers' rights to cheap lumber. William Whyte, the CPR's western regional manager, let it be known that the railway was considering establishing its own sawmills and distributing lumber at its stations unless the lumbermen agreed to "handle the business on a reasonable basis of profit and without any attempt to maintain high prices by the continuation of the present combine methods."[32]

Whether or not the railway was serious is difficult to assess. As the owner, aside from the government, of the largest timber reserves it was certainly well poised to enter the lumber trade, but to do so would be to invite even stronger accusations of monopoly than the WRLA and existing mill operators were receiving. The statement, however, served other purposes. It gave the railway an opportunity to take up the cause of settlers' rights to reasonably priced lumber and to drive a wedge between retailers and manufacturers.[33] The wedge was soon driven. B.C. manufacturers met with CPR officials to explain their precarious financial situation and to demonstrate that high retail prices on the Prairies could not be blamed on them. According to the mill owners, freight rates on lumber shipped eastward from B.C. were more than double the mills' wholesale cost of production.[34] Moreover, the CPR risked lost revenues if the B.C. mills were forced out of the market by low-priced American lumber. An agreement was quickly struck whereby the railway would reduce its rates and the mills would reduce their wholesale prices. The new rates varied between 40 and 50 cents per 100 board feet of lumber, depending on distance, again bringing the rates in line with current Ameri-

can rates. As well, wholesale price lists were to be posted at all CPR stations to enable settlers to determine local retail markups.[35]

The much-publicized controversy and subsequent drop in retail prices was hailed as the end of the WRLA's hold on the Prairie lumber trade, but the association continued to flourish. By 1906 it claimed a total membership of 497 retail yards, 238 of which were located in Manitoba. The other 259 were in Saskatchewan and Alberta, reflecting the association's drive westward.[36]

The 1904 price decreases did not lead to lasting peace. Within two years complaints of high prices and undersized lumber again surfaced in farm journals. By this time the issue had become politically embarassing since the continuing public outcry against high lumber prices was viewed as unfavourable publicity for the Dominion government's settlement campaign, and in February 1907 the government appointed a committee of inquiry to investigate charges of price fixing and combine activity by WRLA members.[37] The committee subsequently decided that both the WRLA and the manufacturers' associations constituted combines that resulted in excessive lumber prices on the Prairies. Curiously, this judgment was not followed by government censure or steps to break up the associations. In effect, the inquiry simply provided justification for the continued free entry of cheap American lumber.

The climate of suspicion and hostility that emerged out of the settlers' belief that the WRLA extracted unfair profits at their expense lingered long after the settlement boom ended in 1913. It likely contributed to many farmers' reluctance to invest in materials to improve their buildings and to their enthusiastic acceptance of mail-order lumber and building kits as soon as they became available.

Growth and Speculation: Selling Lumber during the Settlement Boom

The dramatic increase in Prairie settlement after 1900 was accompanied by a shift towards syndication in the lumber industry. By 1907 the WRLA was already confronting the issue of lineyards, which had first appeared in Alberta around 1903. By 1907 other lineyard firms were being established across the Prairies. In that year an estimated 288 of the 470 dealers in the WRLA were lineyard operators. As a result, control of the association quickly shifted from small independent dealers to large firms with numerous subsidiaries, each of which was a voting member.[1]

The growth of lineyards was one consequence of accelerating American and European investment in the western lumber trade. Lumber manufacturing and retailing were perceived as highly lucrative areas for investment; the assumption was that the settlement boom then under way would generate an almost limitless need for lumber. This optimism was fed in no small part by the extensive network of railway lines being built throughout the region by the CPR, Canadian Northern, and Grand Trunk Pacific, and the vigour with which these firms and the Canadian government promoted settlement. Lumber entrepreneurs began projecting sales on the basis of the amount of track laid, the number of new townsites created, and the amount of land made available for settlement. As A.D. McRae, one of the major figures of the industry, explained,

> The Canadian Northern will build in 1910 700 miles of railroad in the provinces of Saskatchewan and Alberta exclusive of the mainline to the Coast. It is fair to assume that the CPR and GTP together will build as much mileage in the way of branch lines, making 1,400 mileage in all. By looking at the map you will see that there is a very good village or town every twelve miles, so that the railroad construction will place in 1910 120 new towns on the map — all wanting lumber. In the light of past experience, these towns should average two retail yards each ... an initial stock of twenty cars [of lumber] for each yard would be a very moderate estimate....[2]

McRae's own operations epitomized the dramatic shift in scale then taking place. McRae was a partner in the firm of Davidson and McRae, closely affiliated with the Canadian Northern Railway and with MacKenzie and Mann, the railway's free-wheeling directors. After successfully promoting land sales in Saskatchewan for the Canadian Northern between 1902 and 1905, Davidson and McRae extended their involvement to other MacKenzie and Mann projects, notably assembling and developing a vast lumber manufacturing and retailing empire.[3]

The first step, in 1907, entailed acquiring the Fraser River Mill, a giant facility located several miles upstream from New Westminster, B.C. The plant, subsequently enlarged to rank as one of the largest mills in the world, served as the major lumber manufacturing facility for its newly created parent company, the Canadian Western Lumber Company Limited. Davidson was appointed president and McRae, vice-president and general manager. Its board of directors included MacKenzie and Mann, D.B. Hanna, A.R. Davidson, and R.M. Horne-Payne, all directors of the Canadian Northern, and its authorized capital was ten million dollars, the bulk of which had been raised in England.[4]

Formation of the Canadian Western Lumber Company was accompanied by the development of a network of timber reserves, sawmills, and retail lumber companies. The retail companies were spread across the Prairies, particularly in regions settled by the Canadian Northern Railway. In addition to the Fraser River Mill, the firm established a pair of mills at Golden, B.C., which were run under a subsidiary called the Columbia River Lumber Company. In 1911 it opened the Big River Lumber Company plant at Big River in northern Saskatchewan, billed at the time as the largest spruce mill in the world.[5] A series of lineyards was initially set up in connection with the facilities of the Saskatchewan Elevator Company, another MacKenzie and Mann enterprise of which A.D. McRae was a director, then additional yards were either opened or acquired be-

tween 1907 and 1910. Between 1910 and 1912 the Canadian Western Lumber Company acquired or established a succession of chain-yard firms including the Security Lumber Company, based in Moose Jaw and Regina, and the Western Canadian Sawmill Yards Limited, with headquarters in Saskatoon; the Coast Lumber Yards Limited, with its head office in Winnipeg; and the Calgary-based Crown Lumber Company, which had outlets throughout southern and central Alberta.[6] By 1912 the Canadian Western Lumber Company controlled 175 Prairie lumberyards. The development of this diversified lumber-manufacturing and -retailing organization was an important component in MacKenzie and Mann's master plan for integrating their various enterprises.

One of their major lineyard competitors was S.H. Bowman's Revelstoke Sawmill Company, which had begun its retail operations in 1906, a year after Bowman, a former Minnesotan with American banking and lumber connections, acquired a large mill at Revelstoke. The Revelstoke Sawmill Company's subsequent history of expansion and mergers rivalled that of the Canadian Western Lumber Company. In 1906 Bowman began assembling two retail chains under the names Revelstoke Sawmill Company and Bowman-Sine Company, with branches in Alberta and Saskatchewan. Construction of another Revelstoke mill and acquisition of other lineyard firms followed. In 1911 he bought the Calgary-based Globe Lumber Company and the Alberta Lumber Company. In 1912 Bowman-Sine assumed the name of a former subsidiary, Atlas Lumber, although it continued to operate lineyards under the Revelstoke Sawmill and Globe Lumber names as well.[7]

In contrast to the Canadian Western Lumber Company, the Revelstoke firm did not remain in manufacturing for long. When its Revelstoke mills were destroyed by fire in 1910 and 1911, the firm moved its headquarters to Calgary and concentrated exclusively on retailing, purchasing its supplies from other manufacturers.

Other firms attempted to integrate both manufacturing and retail aspects of the trade, but on a more limited scale than the Canadian Western Lumber Company. Two major examples are the Rat Portage Lumber Company, which maintained a number of lineyards in Manitoba and Saskatchewan but remained primarily a manufacturer and wholesaler, and Cushing Brothers, a Calgary-based manufacturer that operated factories and outlets in major towns and cities in Alberta and Saskatchewan. However, with the conspicuous exception of the Canadian Western Lumber Company, the Prairie lumber business remained primarily divided into distinct manufacturing, wholesale, and retail sectors, with syndication concentrated at the retail level.

The trend towards lineyard retailing was strongest where new settlement was occurring on a large scale in Saskatchewan and Alberta. There 10 out of the 14 largest firms fought for dominance. In contrast, few major firms moved into Manitoba before 1914. It would appear that Manitoba's longer-established agricultural base offered less potential for fast profit, and as a result its rural lumber trade continued to be dominated by smaller companies (*see* Appendix C).

The move towards lineyard syndication mirrored a similar but slightly earlier trend in the U.S. Most of the initial lineyard companies were in fact established by Minnesotans.[8] American lumberman inevitably regarded the Canadian Prairies as a natural extension of their market and took various steps to gain access to it. In some cases they moved north to acquire or establish new firms with headquarters in Canada, as in S.H. Bowman's case. More frequently they simply set up subsidiaries that were controlled from Minneapolis through Canadian offices. This arrangement gave them the added advantage of shifting their sources of supply to American or Canadian mills according to market fluctuations. Three such firms were the Rogers Lumber Yards, Pioneer Lumber, and Reliance Lumber, which were running extensive lineyard operations in southern Saskatchewan and Alberta by 1912.

Between 1907 and 1912 the retail trade became totally dominated by lineyard companies, most of which were concentrated in specific regions defined by railroad lines. Most business transactions between manufacturers, wholesalers, and retailers took place in the cities in which the lineyard firms had their head offices. By 1912 Winnipeg, Regina, Saskatoon, Moose Jaw, Calgary, and Edmonton were the major distribution centres, with Winnipeg ranking as by far the most important centre in the entire Prairies. Its key role was described in the August 1912 issue of the *Western Lumberman*, the industry's trade journal:

> Here are to be found the headquarters of a number of important line-yard concerns which have their yards spread over different sections of the three provinces. These firms do practically all their buying at Winnipeg so that the volume of orders booked for delivery at other points added to those for local delivery make a truly tremendous volume of business.

> Winnipeg is the prairie Mecca for the lumber salesman and the lumber buyer as well ... dealers in eastern spruce and pine, in coast and mountain products, in northern spruce and in the lumber sawn across the line are all actively and numerously engaged in getting their share of the business and in supplying the ever-growing needs of the yard men.[9]

Winnipeg's dominance is illustrated by the fact that 16 of the 24 major lineyard companies had head offices there in 1912. The largest of these were Beaver Lumber, with 60 yards spread across Manitoba and Saskatchewan; Coast Lumber Yards, with 40 yards in Manitoba and Saskatchewan; and Monarch Lumber, which controlled 52 yards, primarily in Saskatchewan.[10] The city's 1912 directory listed 27 lumber retailers, 53 wholesalers, and 4 manufacturers. The high number of wholesalers was indicative of the scale of buying and selling in Winnipeg at that time.[11]

Regina and Moose Jaw were minor lumber centres in comparison. Regina contained seven large retail outlets and was the headquarters of one company, the Lumber Manufacturers' Limited, which controlled approximately 40 yards by the end of 1912. Moose Jaw contained about a dozen lumberyards and planing mills, including the headquarters of the Security Lumber Company.[12]

Calgary ranked as the second most important lumber distribution centre on the Prairies in 1912, with 16 lineyard companies in addition to several large planing mills. The major locally based firms included Cushing Brothers, Crown Lumber, and the affiliated Revelstoke, Atlas, and Globe firms. Crown controlled 52 yards in the province in 1912 while the Revelstoke group operated 60 yards in that year.[13] Although Calgary's location made it an important distribution point for lumber from the B.C. interior (the Mountain Lumber Manufacturers' Association maintained its headquarters in the city), it was also a major centre for the sale of American lumber, particularly from Washington and Oregon. Calgary-based lineyards obtained as much as 70 per cent of their supplies from American mills in 1911.

In contrast, Edmonton's lumber industry relied extensively on local and regional suppliers. The city contained several sawmills that processed logs from spruce stands to the north.[14] The dominant locally based lineyard firm was Hayward Lumber, which ran 28 retail outlets in north-central Alberta by 1915.[15] By 1913 Edmonton also served as a major distributing point for lumber from northern B.C. sawmills.

The wholesale firms and lineyard companies' supply depots in the major cities in turn serviced retailers in outlying communities. The nature of the rural retail trade varied according to an area's stage of settlement. Where farms were well established, sales were dependent upon the success of annual harvests and upon farmers' inclination to spend their earnings on new buildings or on improving old ones. In newly opened areas the preliminary building needs of farmers and businessmen accounted for the bulk of sales. It was the newly opened markets that generated much of the windfall profit during the pre-1914 years, and consequently it was also the newly opened markets that sparked the most intense competition among lineyard companies. Competition peaked between 1910 and 1912 when large numbers of American settlers entered the Canadian Prairies.[16]

Initial demands for lumber were often so great that dealers kept selling out of supplies before they could get around to building their own facilities. In one instance a lineyard manager, sent to establish a yard at Scott, Saskatchewan, by the Farmers' Lumber Company of Saskatoon in July 1908, sold his first carload of lumber before he could build an office. For several weeks each shipment was snapped up as soon as it arrived:

> The Farmers' Lumber Company kept sending me material and I kept selling it faster than they could supply it, and it was a while after that that I built an office. In the meantime, I guess you could say my lumber yard was the spur track down by the station and my office was under my hat.[17]

The intense competition between rival yards frequently led to price wars, even in well-established communities such as Swift Current, where one erupted in the fall of 1911:

> A price war is on among the lumber dealers of Swift Current, Saskatchewan, and ... lumber — real lumber — is being sold at slaughter prices. It seems that two or three new yards have recently been opened at Swift Current and that American and Canadian lumber is being brought into competition in the local market. It is stated that all the dealers are determined to get the lion's share of the trade no matter which figure they get for their lumber and that one dealer threatens to give his away before he will see the other people take his business.[18]

4 The first business at Castor, Alberta, July 1909. The tents in the distance belong to the surveyors.
Glenbow Archives, Calgary, NA-3685-5

Price wars and uncontrolled competition were curbed to a degree by deals between lineyard companies. Rival yards and local independent dealers were often bought out and closed, or run as "company competitors" or adjuncts of their purchasers' outlets. At the height of lineyard expansion, firms swapped outlets in order to consolidate their dominance within certain regions.[19]

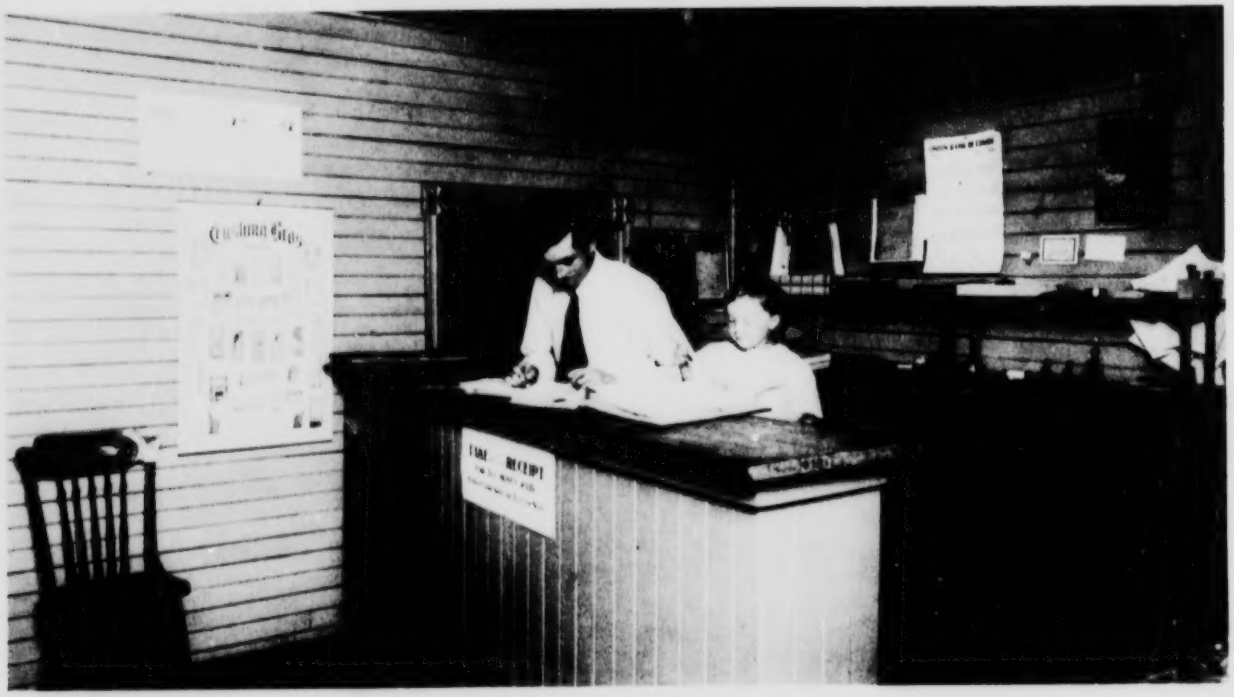
Once the initial rush of settlement had subsided, sales became tied to the success or failure of grain harvests. Rumours of drought or low wheat prices caused retailers to hold back on their orders from manufacturers and wholesalers, creating backlogs of stock at mills and distribution points. Once good harvests were confirmed, mills were deluged with orders, creating shipping havoc since rail cars were tied up with grain by that time. Temporary lumber shortages followed, especially during the peak settlement years of 1910 and 1913, raising cries of complaint from frustrated buyers and rumours of price gouging. The railways and lumber manufacturers attempted to induce retailers to order in advance by lowering rates, but apparently without much success.[20] Periodic lean crop years such as 1907 and 1908 made veteran retailers reluctant to stock supplies on credit. The delicate balance between wheat harvests and lumber sales kept all sectors of the industry in a state of nervous apprehension until late summer each year when the success of the harvest and level of wheat prices were known.[21] Manufacturers who controlled their own lineyards were spared these worries to some extent since they could

5 Atlas Lumber's first office at Cadillac, Saskatchewan, June 1914.
Glenbow Archives, Calgary, NA-1801-9

regulate their shipments of lumber. In the event of low demand, the lumber ended up at the local yards rather than at the mills.

The close connection between grain harvests and lumber sales was to a large extent due to Canadian banks, which would not extend long-term credit to farmers who did not have clear title to their land. The only financing available to the majority of new Prairie farmers consisted of short-term credit notes, usually repayable within three to six months. Banks habitually refused credit in years of crop failure or low grain prices; they also pressed for payment of outstanding loans at the end of each season, forcing farmers to sell grain or cattle at prevailing rates that were not necessarily favourable.[22] These circumstances compelled retailers to sell building materials on credit, in effect assuming the role of financier.[23] Farmers negotiated credit with lumber dealers on the basis of liens against their property and made similar arrangements for other purchases such as implements, but whereas implement dealers could seize their equipment in the event of default, lumber merchants were faced with the unsavoury prospect of seizing buildings and land. Failure to pay off an outstanding account within the year in which the lumber was purchased usually meant a loss of further credit. The manager of a Security Lumber Company yard in Glenavon, Saskatchewan, described how dealers attempted to regulate credit sales in 1913:

> We have found it necessary, owing to the money stringency, to adopt a very close review of a purchaser's standing before allowing him the privilege of obtaining goods on credit. We



6 Interior of a lumberyard office at Airdrie, Alberta, August 1914.
Glenbow Archives, Calgary, NA-1801-16

> ascertain between the yards in town whether or not he still owes any book accounts, and refuse credit to any man who already owes an account carried over from the previous year. Even if the party does not owe any of us we follow his record as closely as possible and if we then consider him worthy of credit we ask him for a financial statement and proceed with the sale.[24]

Selling lumber on credit was undoubtedly lucrative in prosperous times, but was fraught with risks, lumber dealers' operations themselves being based on bank financing. Since the system of bank credit was unfavourable to both farmers and lumbermen, both groups became advocates of reform to the Banking Act, but the situation remained unchanged before 1914.[25]

The growth of lineyard firms and the intense competition among them led to shifts in methods of merchandizing. Independent dealers were by now largely superceded by local managers or "yardmen" employed by the lineyard companies. The yardman was depicted as a new breed of salesman, "of good habits, not even addicted to smoking. He should be a man of good taste and arrangement for lumber, as well as neat and tidy of person."[26] Furthermore, he should be knowledgeable about construction: "Often, especially in country districts where architects are scarce, the

yardman can be of great assistance to the farmers in sketching off ideas for barns and other outbuildings."

New concern with staff skills and personability was matched by increasing attention to the yards' appearance. Tidy, properly constructed facilities were viewed as important factors in promoting sales. Accordingly, most lineyard firms replaced their temporary shacks and sheds with more substantial structures once a location's viability had been established.[27] Plans for efficient yard layouts, for storage sheds, and for suitable offices — usually small, one-storey frame buildings, often with false fronts — occasionally appeared in the *Western Lumberman*. Lineyards took on a fairly standard look, particularly in small communities where business was based almost exclusively on the farm trade. They became, like railway stations, prefabricated banks, and grain elevators, part of the basic pattern of countless Prairie towns.

Concern for increased efficiency and better customer service was prompted not only by intense competition, but also by new challenges to existing sales methods. In the years immediately following the 1907 government inquiry into the lumber trade, a number of wholesalers began advertising in farm journals, offering reduced prices on direct sales to consumers. Such ads frequently played upon farmers' suspicions about the industry that the government inquiry had done nothing to dispel: "The lumber combine is hard after us because we have dared to make wholesale prices on lumber to farmers"[28] ran a Winnipeg wholesaler's ad in the May 1909 issue of *The Grain Growers' Guide*. "Farmers stand by us in this fight for an open lumber market, and when wanting lumber send us your list of prices. We sell wholesale and ship direct from the mills."

Ads like this marked the start of mail-order merchandizing on the Prairies. Renegade Winnipeg wholesalers and B.C. manufacturers who offered discount prices on carloads of lumber were quickly joined by larger firms and farmers' cooperatives in this new method of marketing that relied on bulk orders purchased by mail rather than sales by local retailers. Firms with offices in Winnipeg, Calgary, Vancouver, and even Toronto were advertising in Prairie farm magazines by 1910. One of the most conspicuous entrants in the field was the T. Eaton Company, which began selling a full range of building supplies including carloads of lumber shipped "direct from the mills, thus avoiding all middlemen's profits," through magazine ads and the firm's catalogues.[29] Eaton's was one of the first mail-order firms to extend its sales from bulk supplies to complete building packages including plans, specifications, and all necessary materials at fixed prices.

The appearance of packaged house and barn kits around 1910 coincided with accelerating immigration from the American Midwest. Significantly, these immigrants were comparatively affluent; many had previously farmed south of the border, and having sold off their assets there, arrived with money to reestablish themselves. They also brought with them a receptiveness to sales methods that were new to the region, for mail-order building sales had been in vogue in the U.S. for several years.[30]

A major drawback to most early mail-order operations, including Eaton's, was that they required payment in full upon delivery, a factor that placed catalogue house packages beyond the reach of most farmers before 1915 when credit became more readily available. In this respect Canadian mail-order firms lagged behind their major American counterparts like Sears, which began offering mail-order mortgages in 1911. Some firms, such as the Lake Lumber Company of Winnipeg, did offer short-term loans and threw in several years of fire insurance on the completed building as an added inducement, but this fell short of long-term financing.[31]

Nor was lumber retailers' competition confined to mail-order lumber products. During the 1890s, alternative building materials, most notably corrugated metal and concrete, became increasingly available to Prairie farmers. Corrugated metal granaries and barns were marketed aggressively from 1909 onwards. The Pedlar People Limited, an Oshawa, Ontario–based firm, proclaimed that an astonishing thing was happening in Canada, "the land of lumbering": "Lumber is getting so poor and costly and labor is so high priced, that you actually save money by using corrugated iron (galvanized) for your barn walls, and metal shingles for the roof. This is the new way to build barns."[32] The Canada Cement Company urged farmers to write for a free copy of the "Concrete Book." "In Canada," their ad proclaimed,

> houses must be solid and substantial. No "gingerbread frills", such as distinguish California bungalows, can be permitted.... It is because concrete, of all materials, best withstands wind, water and cold, that it is fast becoming popular with Canadian home-builders.[33]

7 Globe Lumber's lineyard at Holden, Alberta, 1915. Mouldings, sashes, and doors were stored in the shed at the right.
Provincial Archives of Alberta, Photograph Collection, A-6686

8 Crown Lumber's lineyard at Beiseker, Alberta, was opened in 1909. By 1912 this firm operated 52 such outlets in towns and villages in southern and central Alberta.
Glenbow Archives, Calgary, NA-4079-7

9 A group of farmers with their carload of lumber, Blairmore, Alberta.
Glenbow Archives, Calgary, NA-1384-8

The sudden appearance of mail-order firms and companies selling "lumber substitutes" (as lumber dealers called metal and concrete) created a new need for counteraction by the lumber trade, and once again the WRLA provided it. The WRLA began issuing warnings to its members as early as January 1909, noting the impact of mail-order operations in the U.S. and accurately forecasting a similar trend in Western Canada.[34]

An early effect of mail-order competition was to alert retailers to the potential impact of printed advertising and to their poor image among farmers. Previously they had given little attention to marketing apart from publishing notices of current stocks and prices in local newspapers or farm journals. By 1910 the WRLA was urging them to use newspaper ads to promote additional services, most notably as good sources of design ideas for farmhouses, barns, and outbuildings. The WRLA and the *Western Lumberman* became vehicles for promoting a new sense of professionalism among lumber retailers. By encouraging farmers to become well-acquainted with their products, dealers could appeal to customer loyalties, creating a sense of moral obligation to buy from local businesses rather than from distant and impersonal mail-order establishments. This culminated in a succession of "Be Loyal to Your Own Community" campaigns launched by local merchants in 1914.[35]

BUY EATON LUMBER FOR QUALITY AND SATISFACTION
$950.00
F.O.B. MILL BUYS LUMBER AND MILLWORK FOR THIS MODERN HOME
THE PRICE INCLUDES WINDOWS, DOORS, FRAMES, CASINGS, MOULDINGS, FINISHING LUMBER, LATH AND SHINGLES. ALSO FULL PLANS AND SPECIFICATIONS.
WRITE FOR LUMBER PRICES ON CAR-LOAD LOTS F.O.B. YOUR STATION
QUALITY is the principal consideration in lumber. We sell only British Columbia Coast Fir and Cedar, and guarantee the grades to be No. 1 in every respect.
By shipping direct from the mill to our customers we reduce the cost of handling to a minimum. We eliminate unloading, storing and insuring charges, which usually amount to $3 or $4 per thousand feet. These expenses increase the price of the lumber without adding to the quality.
All finishing lumber, such as siding, flooring, ceiling, finishing, mouldings, window and door jambs are kiln dried.
Dimension lumber, common boards and ship-lap are well air dried.
We Guarantee All Shipments to Follow in Detail the Particulars in our Quotations
We carry a full line of Stock Windows and Doors. See our Spring and Summer Catalogue, page 258, for prices
PREVENT THE COLD WINDS COMING THROUGH YOUR WALLS
Three Reasons for the Plentiful Use of Building Paper
COMFORT
ECONOMY
PROFIT
EATON PRICES ON BUILDING PAPERS
SAMPLES OF PAPERS AND ROOFINGS FREE ON REQUEST
Write for Spring and Summer Catalogue if you have not received it
THE T. EATON Co LIMITED
WINNIPEG - CANADA
We give prompt service and guarantee every article we sell

Farmers' suspicion of lumber dealers remained high, and accusations of arbitrarily high prices and undersized stock continued to be made, especially by organizations like the Saskatchewan Grain Growers' Association, a cooperative originally set up in 1906 to bypass the monopolies of existing elevator companies.[36] In 1913 the co-op entered the lumber business by making arrangements with B.C. mills to supply carload lots. In February 1914 the Grain Growers' Elevator Company became directly involved in the trade, offering carload sales as well as a building-design service.[37] New merchandising methods and alternative building materials began to challenge retailers' monopoly. As long as the settlement boom continued, these challenges posed relatively little threat. When the boom subsided and the demand for building materials fell off, retailers were forced to heed the WRLA's warnings and adopt new strategies.

10 T. Eaton Company ad for bulk lumber sales, 1913. Starting in 1909, farmers could bypass local merchants by purchasing carload lots from mail-order firms.

The Farmer's Advocate and Home Journal, Vol. 48, No. 1067 (5 March 1913), p. 355; The Eaton Collection at the Archives of Ontario

What kind of a silo will yours be ?
Wood—or Concrete ?
IF you were to build two silos—one of wood, the other of concrete—side by side, and then could see them as they will look after five years of service, you wouldn't have to think twice to decide which is the best material. In a few years more there wouldn't be much of the original wooden silo left—the repairing you'd have to do would be as troublesome and cost as much as the building of an entirely new one. But the passage of five, ten, fifteen or even twenty years will make no difference to the hard-as-rock wall of the concrete silo.
CONCRETE SILOS LAST FOREVER
WIND, rain, fire and lightning are alike defied by concrete. You need no insurance against its destruction, because it cannot be destroyed. Concrete silos are best for another reason. The concrete keeps the ensilage at an even temperature, so that it "cures" better, and therefore contains more food-value for your stock.
YOU CAN BUILD ONE YOURSELF
NO matter whether you have ever used concrete or not, you can build a concrete silo. Our book, "What the Farmer Can Do With Concrete," gives all the information you will need, not only about silos, but about scores of other uses for concrete on the farm. It isn't a catalogue, nor an advertising circular. A handsome book of 160 pages, well illustrated, and written for farmers. It is free. Just send your name and address on a postcard or in a letter and the book will be sent free by return mail.
Address Publicity Manager
Canada Cement Company Limited
505-557 Herald Building, Montreal
WHEN you buy Cement be sure that the "Canada" label is on every bag and barrel. Canada's farmers have found it to be the best.
CANADA CEMENT

11 Around 1910, cement and metallic siding companies began to challenge the monopoly of lumber as a farm building material, and ads began to appear in farm journals to promote the superior durability of the new products.

The Farmer's Advocate and Home Journal, Vol. 48, No. 1069 (19 March 1913), p. 449

Grain Growers Why Carry This Load?

Buy direct from the Mill and obtain for yourself the unearned middlemen's profits.

We quote for delivery on a 40c. rate. FREIGHT PREPAID, as follows:

Prices subject to change without notice.

1x4, No. 1 Fir V Jt. Clg	$27.00
1x4, No. 3 Fir V Jt. Clg	24.50
⅝x4, No. 1 Fir V Jt. Clg.	22.50
⅝x4, No. 3 Fir V Jt. Clg	20.50
1x6, No. 1 Fir Drop Siding	$27.00
1x6, No. 3 Fir Drop Siding	25.00
1x6, No. 1 Cedar Drop Siding	33.00
1x6, No. 3½ Fir Drop Siding	22.50
½x6, No. 1 Cedar Bevel Siding	25.00
1x4, No. 1 Edge Grain Flooring	$36.00
1x4, No. 1 Flat Grain Flooring	26.00
1x4, No. 3 Flooring	24.00
1x4, No. 3½ Flooring	22.50
1x6, No. 1Fir, Shiplap	$18.50
1x8, 10 or 12	19.50
1x6, No. 2 Fir, Shiplap	16.50
1x8, 10 or 12	17.50
1x8, No. 1 Spruce, Shiplap	20.50
1x8 or 10, No. 1 Com. Boards, Fir	19.50
No. 2	17.50
2x4—12 to 16 ft., No. 1 Fir, Dimension	$19.50
10, 18, 20, No. 1 Fir, Dimension	21.50
2x6 or 2x8—12 to 16 ft., No. 1 Fir, Dimension	19.50
10, 18, 20, No. 1 Fir, Dimension	21.50
2x10 or 2x12—10 to 16 ft.	21.50
18, 20, 22	23.50

All materials fully guaranteed and subject to examination.

Send us your list of material required.

Grain Growers' Lumber Co., Ltd.

BOX 392 **VANCOUVER, B.C.**

12 Ad for the Grain Growers' Lumber Company, a subsidiary of the Grain Growers' Elevator Company.
The Nor'-West Farmer, 20 July 1914, p. 831

Collapse and Resurgence: Responses to a Changing Market

The Prairie lumber trade's era of continuous expansion ended in 1914 with near-disastrous results for firms that had overexpanded in anticipation of a continuing demand based on new settlement. Its end came as a result of a decline in settlement, a succession of dry years, a general recession, and the outbreak of war. The full realization of the serious change in market conditions was dulled for a time by the belief that the drop in sales was temporary, similar to previous slumps, and would be remedied by a good harvest. Lumber industry analysts ascribed the increasingly sluggish demand to farmers' excessive indebtedness, overproduction by B.C. mills, competition from mail-order companies, and occasionally, to the prevailing global recession.[1] The general deterioration in financial conditions was compounded as banks called in outstanding loans and tightened credit. This not only discouraged farmers from buying lumber, but also left lumber manufacturers, wholesalers, and retailers with large inventories and heavy debts.

Hard hit were the B.C. manufacturers and in turn the B.C. economy. After a succession of years in which over a billion board feet of lumber per year had been milled for the Prairie trade, in 1914 B.C. production fell to 700 million board feet, much of which could not even be shipped due to the lack of demand. By the fall of 1914 numerous mills were closing, particularly in the interior of the province.[2] Among the near-casualties was the Canadian Western Lumber Company, forced to undergo financial restructuring in December to avoid bankruptcy.[3] (This crisis ended Davidson and McRae's direct involvement in management of the firm.) The drop in Prairie demand forced the B.C. government to reexamine its previously laissez-faire policies and seek alternative markets for its lumber. The drop also prompted it to reassess the Prairie trade, and henceforth the B.C. Forest Service was increasingly active in promoting B.C. lumber on the Prairies.

The drop in lumber sales hit the retail yards hard, especially in marginal farming areas such as the Alberta Dry Belt. Crown Lumber, which had expanded extensively there, ended 1914 with a loss of $171 000; like its parent Canadian Western Lumber, it was saved from collapse by internal reorganization and by the disposal of many of its retail yards in marginal farming areas.[4]

The crises led to increased pressure for changes to the financial system. Provincial legislatures debated bills to establish agricultural credit societies that could grant long-term loans for agricultural purposes, including building construction, but none were passed on the Prairies during the crisis.[5] Relief came instead through passage of the 1914 federal Finance Act, which suspended the gold standard and permitted banks to print their own currency as a wartime measure.

These deliberately inflationary measures removed the former constraints placed on banks and promoted easier credit for farmers.[6] Banks abruptly began to encourage long-term farm loans, and this had an immediate effect on lumber retailing. The quarter of a million farmers who had settled during the previous decade formed a vast potential market for building materials as their financial situations improved and they could afford to replace their initial buildings with more substantial ones. This was a fundamentally different market since it involved aggressive salesmanship rather than merely supplying essential materials for preliminary shelter. Farmers now had to be persuaded to improve their facilities. As the *Western Lumberman* put it in June 1914, "lumber used to be bought; now it has to be sold."[7]

New concern with marketing strategies coincided with the accelerating campaign to promote mixed farming — as opposed to single-crop farming — on the Prairies. Proponents of mixed farming included all levels of government, agricultural colleges, railroads, banks, farm journals, newspapers, and experts of all description. While rationales varied, all agreed

13 An ad promoting lumber retailers' use of WRLA plans.
Western Lumberman, Vol. 13, No. 9 (Sept. 1916), p. 16

that mixed farming would bring greater economic stability to the region. The lumber industry joined the growing chorus and urged its retailers to actively promote the cause for straightforward reasons: mixed farming required more barns and outbuildings, and these in turn would generate greater lumber sales.

> In helping to bring about this change in methods there is an opportunity for effective and meritorious missionary work on the part of the army of prairie yard managers in Manitoba, Saskatchewan and Alberta. They are in close touch with the farming community at all times of the year, and as their advice is frequently sought concerning various details of farm economy, we feel confident that if they will only take the matter to heart the good efforts of their close interests will quickly be made manifest.[8]

The lumber dealers' objectives were aided in no small measure by various provincial agencies that began distributing free farm building plans and building information. In 1915 the B.C. Forest Service undertook publication of pamphlets containing building plans prepared by the Saskatchewan College of Agriculture. This series became a vehicle for promoting mixed farming and better farm buildings. The direct involvement of B.C.'s Forest Service in this campaign is of note here, since the publication and circulation of 250 000 pamphlets was part of a concerted campaign by that province to revive the use of B.C. lumber on the Prairies. The Forest Service appointed lumber commissioners in each province who were charged with keeping "in close touch with agricultural authorities who are running exhibition trains and endeavouring to impress on farmers the necessity for more and better buildings."[9] Ads in newspapers and farm journals, as well as travelling exhibits that promoted B.C. lumber at summer fairs and on better-farming trains, were used by the Forest Service and manufacturers' associations from 1915 onwards.

The popularity of plan books and plan services prompted a wide variety of firms and associations dealing directly or indirectly with farmers to adopt them. The WRLA opened its own architectural office and began offering plan books and custom design services in 1916.[10] The plan books were widely distributed to retail members who used them as a means of promoting lumber sales. Various farm and home journals, agricultural colleges, newspapers, farmers' cooperatives, and lineyard companies launched their own plan services in the following year, virtually all based on standardized stud-frame wooden construction. A major part of the strategy for ensuring retail yards' continued dominance in the face of heavy mail-order competition lay in expanding their services. The *Western Lumberman* observed that the local yard manager was increasingly asked for technical advice,

> taking the place, in some measure, of the architect and contractor in the public mind. This is particularly true of the line yard systems, many of which have an architectural depart-

> ment as part of their business ... this movement in the retail business is a conscious effort of the progressive dealers to get away from the dependence on contractors for building plans and making out bills for them and otherwise relying on them for their influence for selling the same.[11]

The goal of improving the Prairies' long-term economic stability united various agencies, institutions, and commercial concerns that formerly had little in common. Better buildings came to be seen as means of improving a farmer's business, upgrading the quality of farm life, and thus ensuring long-term social and financial stability. The retailer's efforts to promote sales were now cloaked in the rhetoric of improving the farmer's lot.

An interesting aspect of this strategy was the campaign launched by lumber dealers in late 1913 and revived intermittently thereafter to promote the silo. The silo came to symbolize the security supposedly inherent in mixed farming, since it stored fodder that could feed livestock in the event of future crop failure. As the *Western Lumberman* put it, "From an economic value there is really no excuse for not finding a silo on every quarter section."[12] One obstacle to its introduction lay in its high cost, for stave-type silos required large amounts of lumber, and silo sales campaigns were consequently tied to offers of credit. This involved financing either by the dealer, or preferably (from the dealer's viewpoint), through local banks. When the Citizen's Lumber Company embarked on a silo-selling campaign in 1920, it advised its managers first to "get the man converted to the value of the silo," then get the support of the banks:

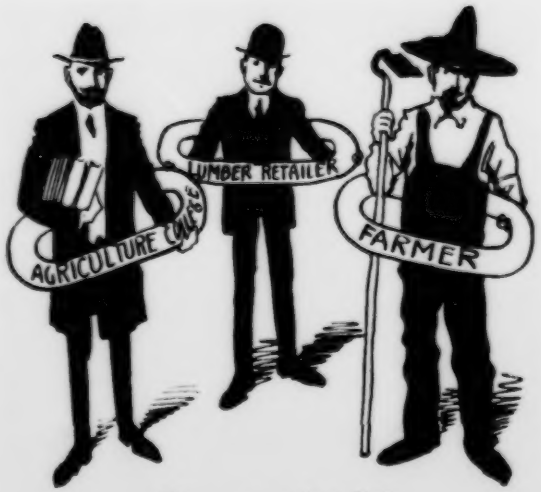
> At Lethbridge, the banks are having a meeting, are selecting a list of men who should have silos, and are then writing personal letters to each of these men urging them to build a silo. They are giving a list of the prospects.... Why are the banks all in favor of the silo? Because they know that the silo and mixed farming is the salvation of Western Canada, and that with silos, the farmers will prosper year in and year out, and at the same time the banks and the merchants will be prosperous.[13]

Lack of ready cash and rejection of the mixed-farming ideal were not the only obstacles preventing the proliferation of silos, barns, and other buildings on Prairie farms after 1914. Despite an upsurge in wheat production resulting from good growing conditions, government wartime incentives, and high crop prices, farmers seemed reluctant to indulge in new buildings other than granaries and implement sheds. Lumber dealers lamented the fact that farmers were often tempted to spend their newfound wealth on less important things:

> There is many a farmer who has his automobile who ought to have put his money into the more profitable silo. But his family wanted the machine and with the influence of his neighbour having one, and getting the "speed bug" in himself, he gave way to the strength of the persuasion, forgetting also what the lumber dealer told him of the great profits of the silo.[14]

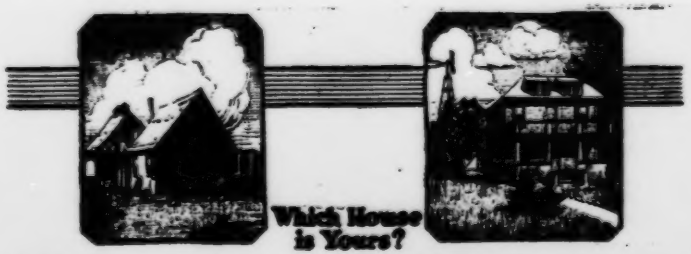
The fact that wheat production was increasing at the same time as experts and government officials alike were proclaiming mixed farming to be the Prairie's salvation added a paradoxical dimension to the prevailing situation during the war years. The poor crop and low prices for wheat in 1914 were dramatically reversed in 1915, when production reached an unprecedented level and prices also soared. Although wheat production tapered off during the remaining war years, prices continued to climb, providing a strong incentive for increased concentration on single-crop agriculture and expanded farm acreage. While the rate at which new farms were established declined after 1913, the size of existing farms increased substantially. In Saskatchewan, where wheat farming was most intense, average farm size increased from 188.8 acres in 1911 to 209.6 acres in 1916 and to 235.3 acres in 1921.[15] While the number of farms grew by 25 per cent between 1911 and 1921, the cultivated acreage in the province grew by 100 per cent.

Prairie lumber sales also increased dramatically between 1915 and 1920. By the fall of 1916, lumber ranked as the third-largest commodity shipped by rail on the Prairies, after wheat and coal.[16] Lumber manufacturers in the east Kootenays reported that production had increased by 71 per cent over the previous year and approached the record shipments of 1913.[17] After bottoming out at $15.5 million in 1915, B.C.'s lumber sales climbed to $21 million in 1916 and to a record $28 million in 1917. Income on shingle production was more spectacular, jumping from $650 000 in 1914 to $4.5 million in 1916 and to $6.9 million in 1917. Saw and shingle mills in the province increased to 400 by 1917 and to 450 in the following year. The Prairie market continued to absorb between 50 and 60 per cent of B.C. lumber production during this period.[18]



The connecting link

14 The lumber industry exploited Prairie agricultural colleges' free farm building brochures as a means of promoting sales. The local retailer was now portrayed as an essential adviser on better farming practices.
"Successful Farming and the Lumber Dealer," *Western Lumberman*, Vol. 16, No. 12 (Dec. 1919), p. 47



There is a Difference
Both in Home Life and Farm Value

1920—the banner year for Western Canada! Indications point to a mighty big crop and to the highest price on record for that crop. Also the Participation Certificate yield is now coming in. Surely such an opportune moment has never yet presented itself to Western Farmers to

Build a Real Home

Build for permanence, comfort and utility. Build because a fine set of buildings is an asset when you want a loan, it increases the value of the farm. Build because it stamps you as a progressive farmer. Build because it makes home more homelike. It attracts the girls and boys to the farm—does not drive them away to seek the comforts of city conveniences. Build because modern buildings create modern conditions, denote a permanence of purpose and set a standard for the community that will raise the value and spirit of the entire community.

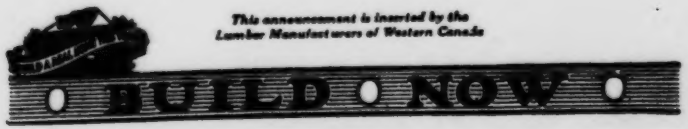
The Farmer is a Business Man

The business man in any manufacturing line puts back a certain amount of the year's earnings into the business in order that the future may be taken care of—the farmer, as a business man, should re-invest in his farm, in his buildings, a certain amount of his year's earnings. The more the investment the larger the returns.

New buildings for your stock. New housing for your machinery. The sign of the times is

Build Now

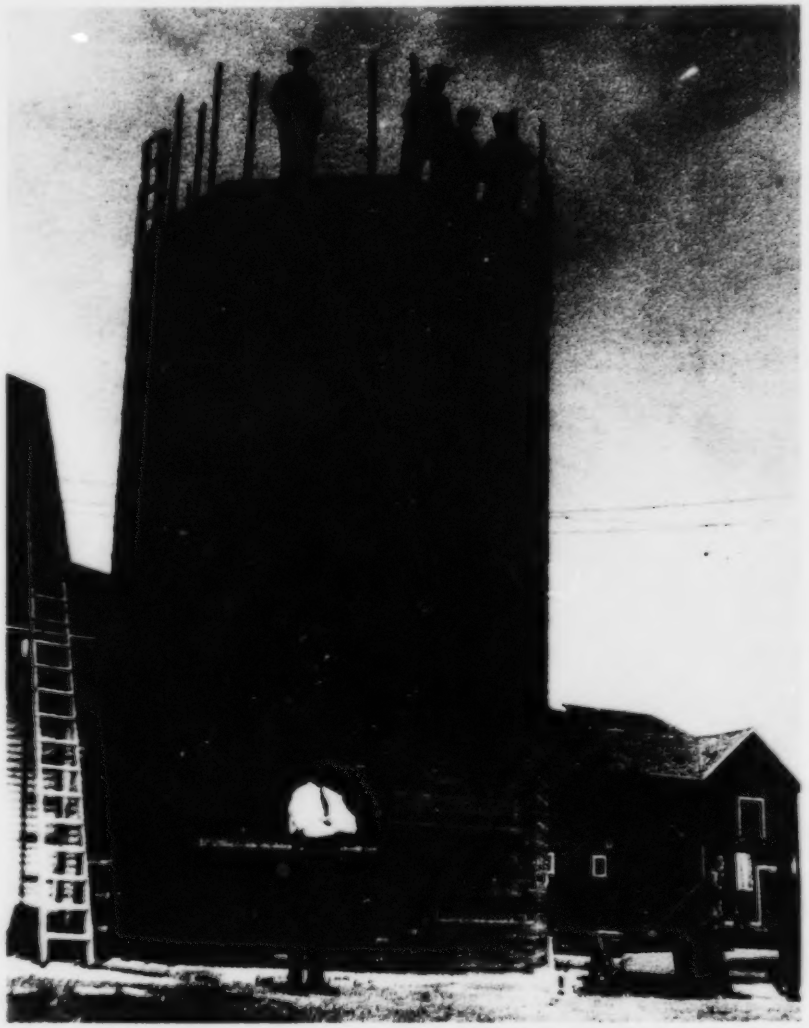
See your nearest lumber dealer. He is fully equipped with many plans, estimates, specifications and full particulars relative to building. Ask him for all the help possible—it is free and gladly given. He has a "Better Building" plan book of 100 pages that he'd like to give you.



15 Lumber manufacturers' advertisement promoting the construction of better farm homes, 1920.
The Nor'-West Farmer, 20 Aug. 1920, p. 1183

Lumber prices doubled between 1915 and 1918,[19] a dramatic escalation fuelled, oddly enough, by sudden demands for B.C. lumber in the U.S. and eastern Canada. Once again manufacturers were accused of holding Prairie farmers to ransom.[20] Construction costs in the Prairie provinces were the highest in the Dominion before 1920, and the value of farm buildings in relation to total farm value was the lowest in the country: 17.37 per cent of total farm value in Manitoba, 13.11 per cent in Saskatchewan, and 12.58 per cent in Alberta, as compared to the national average of 20.99 per cent (*see* Appendix A, Table 4). And despite the campaigns boosting better housing and mixed farming, the Prairies continued to be dominated by small, substandard dwellings and single-crop agriculture. A proportion of this lower building value could be attributed to the fact that wheat farming required fewer facilities than other types of agriculture; however, farm housing also lagged behind the national average. The 1931 census revealed that "over 60 percent of prairie rural homes contain four rooms or less, while the number of such homes in Ontario is less than 23 percent. In Alberta and Saskatchewan there are more rural households occupying two rooms than in any other room group."[21] Since the bulk of Prairie housing predated 1920, we can assume that the statistics would have been similar or even lower in that period. The bulk of the rural demand for lumber was created not by new houses, barns, or silos, but by granaries and implement sheds, reflecting the intensified wheat farming and increased mechanization.

Prosperity was shared by lineyard retailers and the various catalogue firms operating on the Prairies during and immediately following the war years. Although competition intensified between the rival marketing systems, both expanded substantially, peaking in 1920.[22] While catalogue firms' success can only be gauged by the extent of their advertising campaigns and the degree of concern that retailers expressed about them,[23] lineyard retailers' success was clearly indicated by the WRLA's growth. Retail yards increased rapidly between 1916 and 1918, pushing WRLA membership above 1200. Of 1454 retailers operating on the Prairies in 1919, some 1274 were WRLA members.[24] The WRLA's building department had become one of its most active divisions, publishing 100 000 copies of its plan books in 1920 in addition to filling over 1200 individual orders for plans and conducting training courses in building design and construction for lumber dealers in 1919.[25]



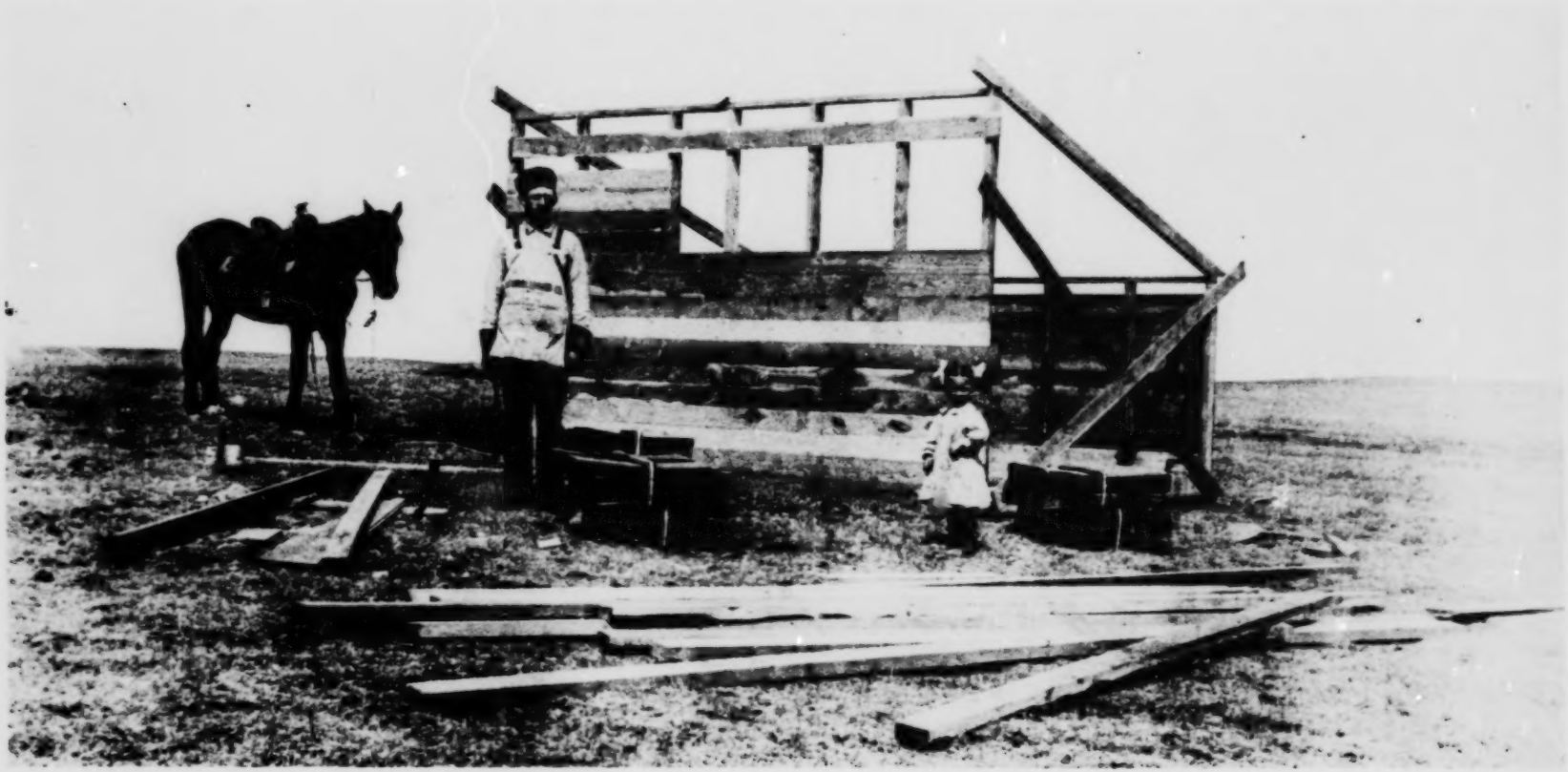
16 A lumber dealer and his sale. Despite aggressive sales campaigns, silos never became prevalent on the Prairies. Stacked-plank silos like this were even less common than stave-built ones (*see* Fig. 59).
Manitoba Archives, Agriculture—Farms Collection, 69

But for most farmers the apparent prosperity of the war years turned out to be a myth; for many the increased profits from wheat farming were largely absorbed by soaring commodity prices and by farm expansion and mechanization; for others, located in areas hit by wheat stem rust or successive low crop yields between 1916 and 1919, high prices were meaningless since they had no wheat to sell.[26] The sheer scale of the market (approximately 250 000 farms by 1920[27]) combined with high wartime wheat prices and easy credit did lead to several years of high profits for the lumber industry. The reverse side of the coin was a dramatic increase in farm debt — prompted in part by the expansion and mechanization — that proved ruinous for many farmers when wheat prices declined after 1920. By 1921, retailers once again faced high inventories and dwindling demand.

The 1920s proved to be a period of stagnation and ultimately of decline in terms of the numbers of farms and the standards of farm buildings on the Prairies. Farms decreased by 50 000 by 1931. While a small percentage of farmers succeeded in replacing their initial accommodations, their standard of living remained woefully low by national standards. Fewer than 4000 farm homes contained bathrooms and just 5100 had running water. As James Gray observed,

> The mode of life on the farms of the prairie changed very little from the first stages of settlement to the onset of the Great Depression. In that catastrophe, the standard of living of the farmers did not really have all that far to drop to touch absolute bottom.[28]

Part II
The Market for Wood and Buildings



17 Guy McCumsey building his house, Munson, Alberta, 1913.
Glenbow Archives, Calgary, NA-2543-10

The Need For Shelter

For the majority of Prairie settlers, the construction of dwellings and outbuildings called for milled lumber even in areas where alternative materials or building traditions existed. Although log construction was an option in or near the tree belt, and the legendary sod hut offered temporary shelter in some parts of the open plains, commercially produced milled lumber quickly prevailed as the predominant material. Its popularity was not due just to its relative abundance and ease of use: to linger in a sod hut or log cabin while neighbours were building houses and barns of milled wood was to invite the stigma of backwardness or failure. The switch to a wood house came to be regarded as a tangible sign of progress even if the house was no more than a two-room shack.[1]

Wood's predominance as a building material is reflected in census statistics. Over 86 per cent of Manitoba's rural buildings and approximately 71 per cent of Saskatchewan's and Alberta's were constructed of wood by 1901. In 1921, wood buildings made up over 92 per cent of all buildings in Manitoba and over 95 per cent in both other Prairie provinces (*see* Appendix A, Table 2), the great majority being wood-frame structures.

For homesteaders, the urge to build with milled wood was hampered by insufficient cash or by the absence of long-term bank loans to buy it in large quantities. Most obtained their land through a pre-emption process that entailed at least three years' occupancy before they received clear title. Since land was the only acceptable collateral for long-term bank financing, most new farmers rarely had access to mortgages, and given the absence of native building materials they were forced to erect rudimentary buildings with whatever available funds they had or on short-term credit from banks or lumber dealers. These circumstances inevitably imposed severe constraints on the houses, barns, and outbuildings that were built on Prairie farms before 1920 and remained the predominant building stock in the region for the next four or five decades. Surveys conducted as recently as the 1960s observed that pre-1920 buildings still dominated in many rural areas; they also noted that Prairie farmhouses were smaller and contained fewer amenities than their counterparts in other parts of the country. The general impression of rural architecture in the region is one of spartan uniformity fostered by the difficult circumstances that accompanied the initial homesteading period and persisted during the following years.[2]

Early settlers were left largely to their own resources. With demand for building materials and skilled labour far exceeding supply, the lumber and construction industries had little incentive to address the problem of appropriate design. When a settler decided to build he purchased lumber from a local dealer and started to hammer and saw, possibly with his neighbours' help. His plan could be of his own invention, an imitation of nearby examples, or a design selected from a magazine or plan book. His success depended on his skills and good judgment, but in all too many instances, particularly among recent European immigrants, wood-frame construction was unfamiliar and carpentry skills were minimal. *The Farmer's Advocate* noted the mediocrity of farm buildings in the region in 1908:

> Men who have no natural bent for building, and no special training ... are called upon to plan, prepare material, and supervise the erection of houses.... That this architecture is far from perfect is admitted by all. And how can it help but be lacking in harmony and uniformity since there are practically as many architects as buildings, and all of them with varying ideas of propriety, picked up at random in a life of work at other occupations.[3]

Unfamiliarity with wood-frame construction was a chronic problem during this period, both on the Canadian Prairies and in newly settled regions in the U.S., where experts reported numerous building collapses "due to faulty workmanship and lack of information regarding plank frame requirements."[4]

18 Shed-roofed dwelling, Boissevain area of Manitoba, ca. 1912.
Manitoba Archives, Boissevain Community Archives Collection, 123

19 Gable and shed-roofed combination at Valparaiso, Saskatchewan.
CIHB, 1974

The inevitable result of limited funds and limited skills was a prevalence of stark, diminutive shacks containing one or two rooms. If designed with some foresight, such buildings could be, and frequently were, enlarged later, either by adding to them or by incorporating them as wings of larger houses.[5] This was a major reason for the popularity of shed-roofed shanties as start-up residences. Simple and inexpensive, this basic structure could readily be converted into the summer kitchen of a larger house at a later date[6] (Figs. 18, 19). Another widely used plan was a rectangular gable-roofed structure of one and one-half storeys with one or two rooms on each floor and a dugout cellar reached by a trapdoor in the kitchen floor.[7] This type similarly lent itself to future use as a rear wing of a larger residence (Fig. 20).

One major pitfall for novices was underbuildi g for the Prairie climate. Standard light-frame construction called for a minimum of two layers of boards, separated by tar paper, laid over 2-x-4 or 2-x-6 stud framing. The inner layer, referred to as sheathing, could be built from common boards or shiplap laid horizontally or diagonally, preferably in two thicknesses. Shiplap was generally favoured since its notched lap-joint offered a tight fit. The outer layer, called siding, frequently consisted of more shiplap in the case of preliminary houses, although various types of finished siding were available, the most common being tapered clapboard, available in various widths, and dropsiding, or open shiplap, which had a flat exterior surface with a bevelled notch on its upper edge.[8] To cut costs, homesteaders frequently omitted this outer veneer, substituting a layer or two of tar paper instead (Fig. 21). Many early frame dwellings suffered from insufficient insulation, usually attributable to ignorance of building techniques or attempts to cut costs.

Tar paper was regarded as essential. If properly applied it could ensure a reasonably airtight dwelling even if the wooden sheathing was substandard. As one settler observed, "[tar] paper is as good as a layer of wood, and its much better at keeping the wind out."[9] Another manufactured building material that found wide acceptance on the Prairies in the 1900s was pressed wallboard, most often known by the trade name "Beaverboard." It was a cheap alternative to lath and plaster for interior walls and had the advantages of easy installation and added insulation value.

In the absence of carpentry skills or local sources of advice on how and what to build, many settlers turned to farm journals like *The Nor'-West Farmer* and *The Farmer's Advocate*. Although these publications concerned themselves primarily with news and technical information related directly to farming, house and barn design and construction received increasing attention, particularly after 1900 when the settlers' housing plight became more apparent. Widely distributed throughout the Prairies from the 1880s onwards, these magazines were likely the most readily available sources of building information (Figs. 22, 23). The following request is typical of many made before the settlement boom ended in 1913:

> Give me a plan for a house 16 by 24 feet, 12 feet high, 16 feet to the peak, two rooms downstairs, three rooms and closet upstairs; cellar stairs leading from kitchen under front stairs; two windows in kitchen, one in dining room, one window in each room and closet upstairs....

The reply, accompanied by plans and a material list, was direct.

> We do not see how you would be able to arrange for bedrooms upstairs in a house of the height you suggested. Twelve feet is altogether too low; 14 feet to the plate and a half or slightly less than half the pitch of the roof is the least you can get along with....
>
> This will not be a very warm house. Would suggest additional ply of lumber in walls making two dead air spaces. It is difficult to estimate the cost. We don't know what carpenters in your locality would charge, or the price of lumber and other materials.[10]

Settlers lacking the confidence or ability to take on house construction had the option of hiring carpenters, but this was no guarantee of better designs or reasonable standards of construction. Wherever skilled tradesmen were in short supply and high demand, labourers with minimal skills could easily find work, and they tended to repeat basic plans, not necessarily out of the merits of the design:

> The country carpenter generally shies at what he terms "plan building" simply because they have things about them that he does not understand ... and the "farm contractors" will usually oppose their farmer customers having anything to do with a plan that is different from those they are accustomed to.[11]

Although many settlers contented themselves with spartan accommodations, models for the ideal farm were not absent. Farm journals defined

20 Joseph Greenyard and his family pose in front of their farmhouse near Laurier, Manitoba, in 1909. Greenyard started out with a small, one-and-a-half-storey log cabin that he converted into a wing of his new frame residence.
Manitoba Archives, Robert Lindsay Collection, 52

goals to which settlers could aspire, but the models presented before 1900 were usually borrowed from the mixed farming areas of eastern Canada and the U.S. The prevailing notion was that the Prairies constituted an extension of the eastern settlements and consequently offered the same potential rewards; perseverance and hard work would result in orchards, gardens, and herds of Holstein cattle (Figs. 24, 25).

Such visions likely comforted and reassured homesteaders as they surveyed the treeless expanse of their new environment. So, too, did the illustrations and plans for the buildings that would be the hearts of those future farms. Characteristic house designs were for spacious two-storey brick or stone structures featuring vestibule, hallways, open stairwells, and numerous rooms.[12] The fact that heating materials were as costly as building supplies did not seem to register until well after the turn of the century. Barn designs, similarly borrowed from the East, also anticipated an eventual shift to dairying and mixed farming.[13] The success of some early settlers in certain areas of Manitoba and the territories in attaining the mixed-farming ideal seemed to support the notion that it was within the grasp of settlers throughout the Prairies.[14]

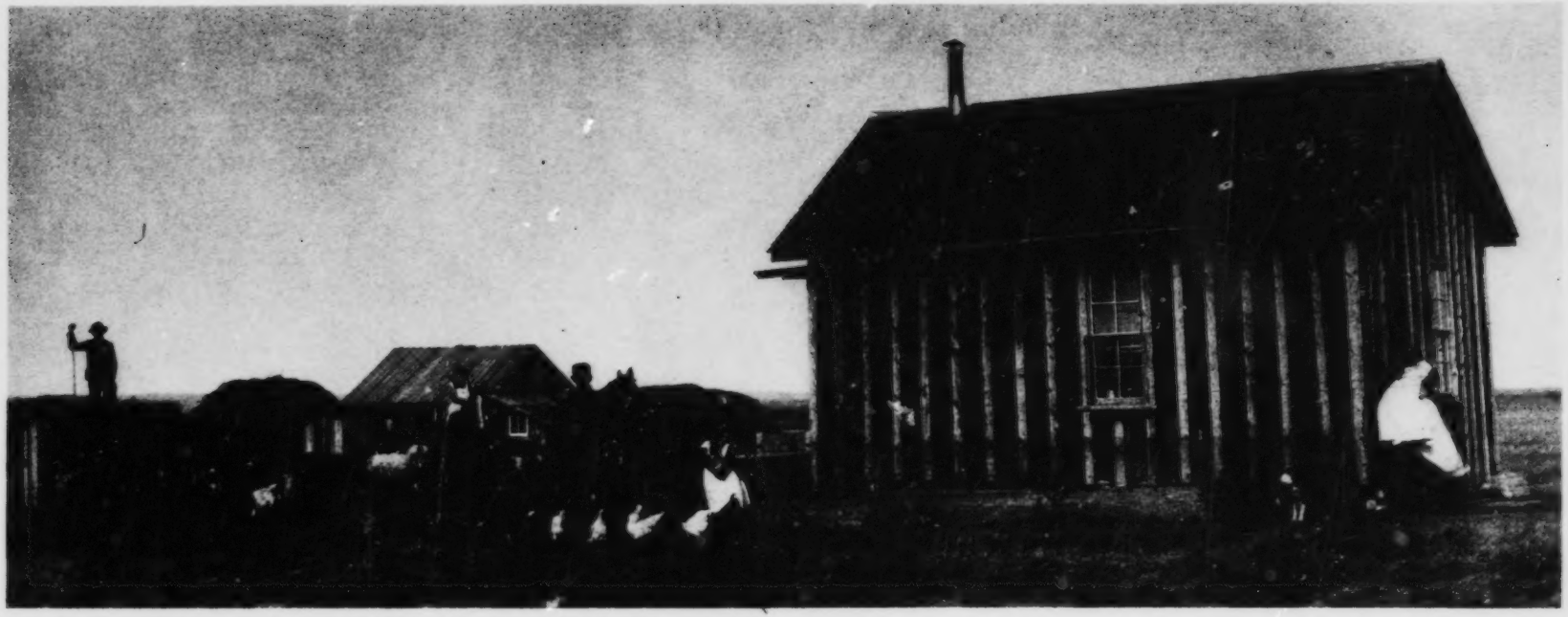
Abandonment of these building models, if not the mixed-farming ideal, began to occur during the early 1900s, reflecting a transition in the type of land that settlers wanted.

> The first period of western settlement was characterized by the phrase that was on the lips of every settler as he looked for a location, "wood, water and hay". The second period, from the turn of the century on, has been characterized by the phrase "ready for the plough". The settlers of this period were more anxious to find open level land with no clearing, or very little clearing so that they could plough as soon as they arrived.[15]

The shift to the open prairie and single-crop agriculture made Ontario-type farms harder to envision, let alone duplicate. Settlers' building needs became more acutely apparent and were soon reflected in the columns of farm journals.

Unfortunately, the gap between most settlers' financial means and the cost of lumber was widening, creating desperate circumstances for many. In 1907 a Saskatchewan settler's request for plans for a house to shelter his family of eight at a cost of no more than one thousand dollars brought this reply from *The Farmer's Advocate*:

> We regret that such a house cannot be built for the price specified, unless the builder is able to do most of the work and can build with logs.
>
> In building farm houses the practice is becoming more general every season of letting the contract to a builder for a certain specified figure which is the estimated cost, but of course the actual cost will be this amount plus the farmer's labour. With such an arrangement not much of a house could be built for $1,000 and, in fact, such a house as we infer our

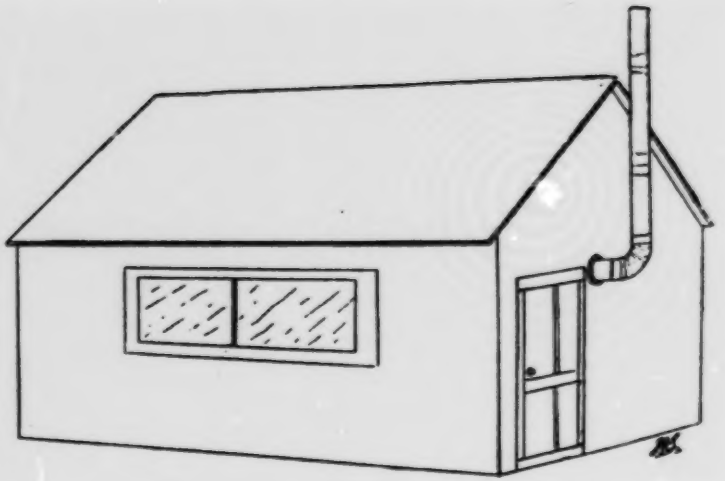


21 Joe Bishop's homestead near Airdrie, Alberta, ca. 1903. Tar paper secured with wood strapping often served as the exterior covering on settlers' houses.
Glenbow Archives, Calgary, NA-598-6

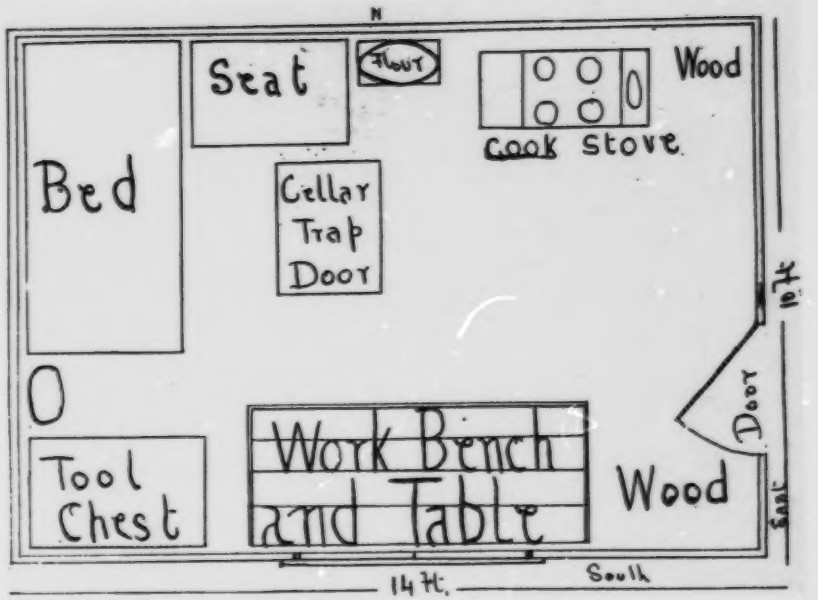
> correspondent would like to build would probably cost more than twice that much, the farmer doing the hauling and excavating. This price might seem high for such a house in the country, but all building materials are high and labour is not plentiful.... Roughly estimating, the cost of building has increased from 50 to 75 percent in the past ten years.[16]

The issue of appropriate design for all farm buildings began to attract the attention of commercial firms and government agencies, especially after the turn of the century. On the whole, the Prairies were not fertile ground for innovative design, but they did become a flourishing marketplace for the latest mass-production and merchandizing techniques. The process, in effect, became one of transplanting building types and systems into a region that had been settled too rapidly to permit its own indigenous designs to evolve. Some forms, such as the Ontario-type centre-gable house and the American "square house," enjoyed relatively wide popularity, but usually in modified form. Most farmers' low purchasing ability restricted the market for large or ornate structures with high price tags. Shapes and styles introduced to the region were usually modified to make them affordable: forms were simplified, and size and ornamentation reduced (Figs. 26, 27).

Prairie barn construction was similarly transformed between the 1890s and 1920. In the 1890s traditional log and heavy-timber construction techniques were employed where native wood was available, and contemporary farm journals published plans for such structures, usually based



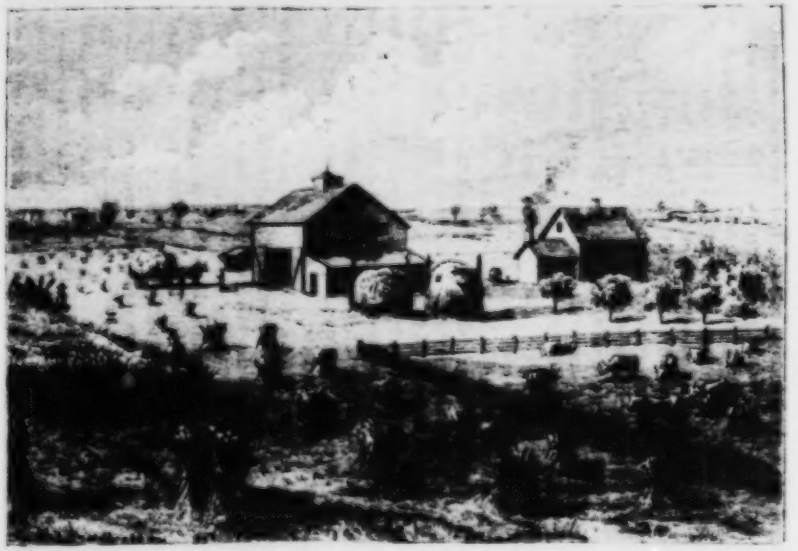
22 Sketch for a homesteader's "convenient and substantial shack" that accompanied "Making Life Livable in a Bachelor's Shack," in *The Farmer's Advocate and Home Journal*, Vol. 45, No. 851 (13 Jan. 1909), p. 50.



23 Floor plan for the homesteader's shack (Fig. 22). The specifications call for a window on the southern exposure and a door facing east, away from the prevailing winds.

directly on Ontario or eastern American models. The introduction of light-timber framing after 1900 revolutionized barn construction across the continent by substantially reducing costs and labour requirements and by permitting the use of smaller dimension lumber, readily available in most regions (Figs. 28, 29). This was especially advantageous on the open prairies where large timbers were expensive or unobtainable. A succession of innovative designs incorporating light-framing techniques and increasingly efficient interior layouts appeared after 1910, the Prairie agricultural colleges, and later the B.C. government, publicizing the new designs through their free farm bulletins.

Commercial responses to the pre-1920 market for farm buildings fall into two general categories: prefabricated or precut building systems that were offered as complete packages, and various plan books and design services that offered advice and direction to the farmer who intended to build for himself or contract out the job. Within the context of the lumber trade, the packaged building systems generally bypassed the need to deal with the established retail network, while the plan books and design services tended to function as an adjunct of the network, especially after 1913.



24 "Prairie Farm after Three Years." English publications of the 1880s and 1890s fuelled prospective immigrants' interest with illustrations like this.
William Fream, "Canadian Agriculture. Part I — Prairie Farming," *The Journal of the Royal Agricultural Society of England*, 2nd ser., Vol. 21 (1885), p. 265

CANADA
What are YOU going to do about it?
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IS THE COUNTRY of THE TWENTIETH CENTURY.
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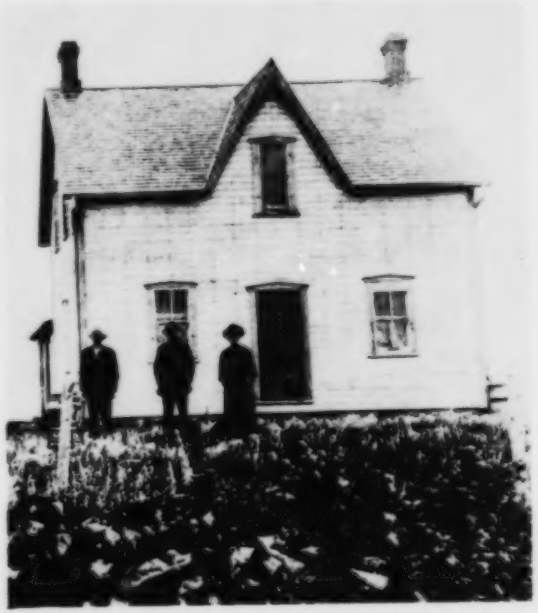
Free Land for Farming.
EMPLOYMENT GUARANTEED TO——
FARM HANDS & DOMESTIC SERVANTS.
For full details, apply to—
Mr. J. OBED SMITH, Assistant Superintendent of Emigration,
11-12, CHARING CROSS, LONDON, S.W.

25 The dream farm was still being used to tempt immigrants in 1912.
Canada: An Illustrated Weekly Journal for All Interested in the Dominion, Vol. 27, No. 340 (12 July 1912), p. xv

27 A variation on the "square house" plan, built near Boissevain, Manitoba, ca. 1912.
Manitoba Archives, Boissevain Community Archives Collection, 196



26 A centre-gable farmhouse in the Boissevain region of Manitoba, date unknown.
Manitoba Archives, Boissevain Community Archives Collection, 272

28 A heavy-timber frame barn built at Darlingford, Manitoba, at the turn of the century. This type of construction was quickly replaced by light-timber framing as standardized milled lumber became widely available throughout the Prairies after 1900.
Manitoba Archives, Jessop Collection, 126

29 A light-frame barn under construction at an unidentified location in Saskatchewan, ca. 1917.
Saskatchewan Archives Board, Photograph No. R-A6689

The Industry's Responses: Buildings by Rail

The Prairies offered an obvious market for premanufactured buildings, which bypassed the hazards of poor local design, high retail lumber costs, and the scarcity of good carpenters. The variety of commercially produced buildings that appeared on the Prairies between the early 1880s and 1920 fall into three general categories: sectional prefabs, prebuilt or "ready-made" farms, and mail-order building kits. The latter consisted of plans and building materials that were occasionally precut to size, but not pre-assembled.

Sectional Prefabs

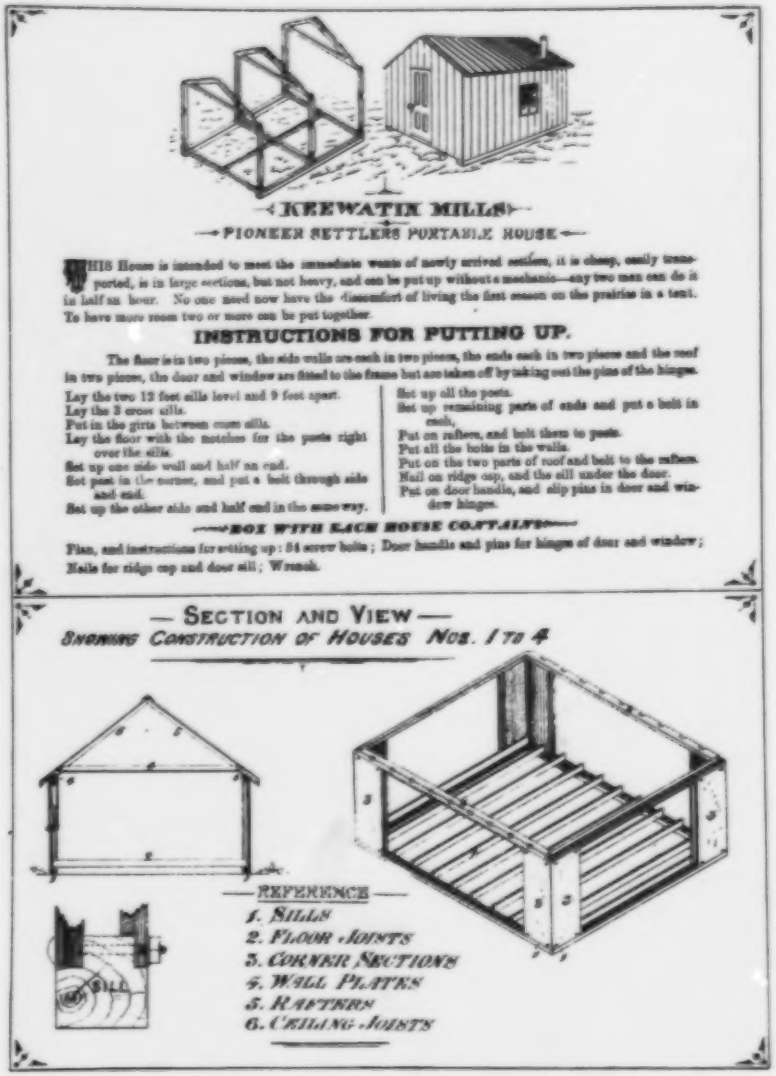
Sectional systems were generally based on a standardized wall panel that could be mass produced and conveniently shipped. They offered the added attraction of quick assembly without the need for highly skilled labour. (Some systems were even designed to permit easy dismantling for relocation.) The concept was not new by the time settlement began on the Canadian Prairies. Panelled prefabs had been employed occasionally in European colonies and were most extensively developed and used during the post-1860 settlement of the American West. Numerous sectional building systems exploited advancements in mass-production technology and the growth of rail transportation, with technical innovations accelerating steadily during the 1880s and 1890s. Cincinnati and Chicago emerged as the centres for extensive prefabricated building industries during this period, supplying the American Midwest.[1] Not surprisingly, Chicago-based firms were the first to test the Canadian Prairie market for prefabs during the early 1880s, but were quickly joined and then displaced by firms based in eastern Canada.

The first known Canadian entrant in the market was H.C. Logan, who announced plans to turn out over 200 portable buildings to be sold in Winnipeg in the summer of 1882. Logan established a factory in Ottawa, in partnership with G.J. O'Dogerty, and began producing his version of the sectional house by September 1882. A contemporary trade journal described Logan's patented system as being "entirely different" from other systems on the market:

> [A house] is constructed in sectional parts on the spot, and when completed can be taken apart, removed and set up again without driving one nail or employing a single artisan.... The side and rear comprise six sections in all, and the floors four sections each.... It is really marvellous to look upon the simplicity of the manner in which all the parts can be put together after being finished. For warmth, comfort and convenience and appearance the house will compare with any wooden structure in Ottawa, besides possessing many novelties which are not in the latter.[2]

Logan was soon joined by other eastern Canadian firms. In July 1882 Lorenzo Forrest of Belleville, Ontario, set up a model house over 100 feet long and two storeys high in Winnipeg to advertise the merits of his sectional wall system, proclaimed by the *Winnipeg Daily Times* as "the most practical and best adapted for our north-west climate."[3] Forrest soon moved his operations to Minnesota and in 1884 obtained a U.S. patent for his interlocking panel system.

A third attempt at cracking the Prairie market was made around this time by James Reilly of Sherbrooke, Quebec, who had obtained a Canadian patent for his sectional wall system in May 1882.[4] Reilly's and Logan and O'Dogerty's prospects got an initial boost in 1882 when the Canadian government ordered 25 houses, 10 kitchens, and 5 stables from the two firms to serve as part of the North West Mounted Police headquarters. Within a year of their completion in Regina the NWMP reported serious structural problems:



KEEWATIN MILLS

PIONEER SETTLERS PORTABLE HOUSE

THIS House is intended to meet the immediate wants of newly arrived settlers, it is cheap, easily transported, is in large sections, but not heavy, and can be put up without a mechanic—any two men can do it in half an hour. No one need now have the discomfort of living the first season on the prairie in a tent. To have more room two or more can be put together.

INSTRUCTIONS FOR PUTTING UP.

The floor is in two pieces, the side walls are each in two pieces, the ends each in two pieces and the roof in two pieces, the door and window are fitted to the frame but are taken off by taking out the pins of the hinges.

Lay the two 12 feet sills level and 9 feet apart.
Lay the 3 cross sills.
Put in the girts between cross sills.
Lay the floor with the notches for the posts right over the sills.
Set up one side wall and half an end.
Set post in the corner, and put a bolt through side and end.
Set up the other side and half end in the same way.
Set up all the posts.
Set up remaining parts of ends and put a bolt in each.
Put on rafters, and bolt them to posts.
Put all the bolts in the walls.
Put on the two parts of roof and bolt to the rafters.
Nail on ridge cap, and the sill under the door.
Put on door handle, and slip pins in door and window hinges.

BOX WITH EACH HOUSE CONTAINS

Plan, and instructions for setting up: 84 screw bolts; Door handle and pins for hinges of door and window; Nails for ridge cap and door sill; Wrench.

— SECTION AND VIEW —

SHOWING CONSTRUCTION OF HOUSES NOS. 1 TO 4

REFERENCE

1. SILLS
2. FLOOR JOISTS
3. CORNER SECTIONS
4. WALL PLATES
5. RAFTERS
6. CEILING JOISTS

30 "Any two men can do it in half an hour": the "Pioneer settlers portable house" manufactured by Keewatin Mills, ca. 1890.
Manitoba Archives, Homes Collection, 14/3

> The sections of which the buildings are composed separated, roofs leaked, expecially on the Logan & O'Dogerty buildings, and floors warped and twisted. It was therefore found necessary to batten sixteen of the buildings, to shingle nine of the Logan & O'Dogerty, and to lay floors in eight of the Reilly buildings.[5]

Problems were not confined to the NWMP barracks. Early sectional prefabs quickly acquired reputations for being too lightly built and inadequately insulated for the western climate, and this seems to have eroded the marketability of subsequent "improved" versions. Other factors likely contributed to their limited success as well. Eastern Canadian firms such as Reilly's and Logan and O'Dogerty's probably suffered from undercapitalization and high freight costs, which eroded their ability to compete with Prairie-based firms.

At least one attempt was made to market sectional prefabs manufactured closer to the Prairie market. The Keewatin Lumber and Manufacturing Company, based at Lake of the Woods in western Ontario, produced two lines of prefabs: a series of "permanent" houses intended for year-round accommodation and featuring panelled walls with two layers of shiplap separated by a layer of tar paper (Fig. 30), and lighter, portable shelters

> intended to meet the immediate wants of newly-arrived settlers, it is cheap, easily transported, is in large sections, but not heavy, and can be put up without a mechanic — any two men can do it in a half an hour. No one need now have the discomfort of living the first season on the prairie in a tent.[6]

In fact, the Keewatin prefabs appear to have differed little from earlier versions and probably enjoyed no more success despite the proximity of their manufacturer to the market.

Further attempts at marketing sectional prefabs occurred after the turn of the century as settlement increased. The second generation showed marked improvements made possible by the recent increase in the scale and sophistication of milling facilities. The first and most innovative of these systems was a line manufactured by the British Columbia Mills, Timber and Trading Company of Vancouver between 1904 and 1910.[7] While it remained based on a standard interconnecting wall panel, the B.C. Mills system featured a panel with five layers of wood and tar paper separated by an internal air space. The panels were linked by means of

31 B.C. Mills, Timber and Trading Company's prefabricated-house display at the 1904 Winnipeg Exhibition.

"An Attractive Exhibit — Ready-Made Houses in Process of Erection," *The British Columbia Lumberman*, Vol. 1, No. 10 (Oct. 1904), p. 23

patented moulded joints and sills, which overcame the flimsiness and draughtiness that plagued the earlier systems. By juggling the number and arrangement of panels, a wide variety of buildings could be offered. The system was initially intended for newly arrived settlers, but it was quickly adapted to permanent buildings, and a catalogue of distinctive house designs was in circulation by 1905 (*see* Figs. 87, 171). Five house models were displayed at the 1904 Winnipeg Exhibition to demonstrate the system and gauge public interest (Fig. 31). The result was a success, judging from response in the local press:

> There are few exhibits that have attracted more attention or have been visited by larger and more interested crowds than the row of houses manufactured by the British Columbia Mills, Timber and Trading Company of Vancouver....
>
> The artistic effects of these buildings have created the impression that they are only intended for summer use, but a careful inspection of the models, describing the various joints used in their construction, will thoroughly demonstrate their adaptability to a cold country and should not in any way be confounded with the portable house which has proved to be very unsatisfactory in cold climates.[8]

The B.C. Mills prefab system was the first to offer Prairie settlers a durable alternative to locally built housing. It was also the first to effectively utilize the ever-expanding railway system for direct shipment on a large scale of premanufactured components from the factory to purchasers. Each structure was prepainted and packaged for shipment by boxcar.[9] Each boxcar contained, on average, the makings for two or three complete houses; larger structures, such as the portable banks manufactured for the Canadian Bank of Commerce, filled one boxcar each. Using the accompanying instructions, the purchaser could quickly assemble his building without skilled assistance in a few days. In effect this system constituted a bridge between previous sectional prefabs and the high-volume precut housing that would follow a decade later.

Despite its sophisticated design and high adaptability, the B.C. Mills prefab system was ultimately hampered by the marketing structure then in place on the Prairies. Its introduction occurred at the same time as the WRLA was attempting to restrict lumber sales to consumers by anyone other than its retail members. As one of the largest suppliers of lumber for the Prairie trade, the B.C. Mills company had developed close ties with the WRLA and was, in fact, an honorary member. In order to retain this status, the firm had agreed to sell its products on a wholesale basis

OUR
READY-MADE HOME
Is Selling Like Hot Cakes
And Giving Still Greater Satisfaction
Absolutely Wind and Cold Proof is the
"WEIR" PORTABLE HOUSE
Made in any size, ready for occupation in a few hours after delivery at your station.
Nothing so Cheap in a Building The Mere Material Could Not Be Got at the Money
Large stock always on hand —Standard size like cut, 22 x 22 feet—four fine rooms
SIX thicknesses of material in walls with 4-inch air space, finished and painted for
$400 f.o.b. WINNIPEG
There are several surprising details you would like to know about these houses. These will be furnished FREE on request by the Selling Agents.
William S. King Co., 232 Portage Ave., Winnipeg

32 The "Weir Portable House" was one of the last sectional prefabs marketed on the Prairies. Ads claimed "Nothing so Cheap in a Building — The Mere Material Could Not Be Got at the Money." Prices started at $400, f.o.b. Winnipeg.
The Grain Growers' Guide, 23 Feb. 1910, p. 3

only,[10] but retailers were reluctant to promote building systems that might threaten their own lumber sales. As a result, prefab purchases were largely confined to institutions or commercial firms, including land companies and building contractors who then resold them to settlers.

While the B.C. Mills prefab system anticipated the mass-production techniques of later precut housing systems, it also predated the mail-order catalogue that was a key to successfully marketing such products. And by the time the WRLA's control over Prairie retailers had been successfully challenged in 1909, the market had been entered by other, more cost-efficient systems. Variations on the panelled-wall concept continued to be marketed on the Prairies in the following years (Fig. 32), but they tended to be sold primarily as temporary shelters or outbuildings such as chicken coops, sheds, and increasingly, automobile garages.

"Ready-Made" Farms

Like sectional prefabs, prebuilt farms made an early appearance on the Prairies. Unlike prefabs, which individual landowners usually purchased in kit form for erection on selected sites, prebuilt farms were orthodox structures erected by a firm or agency to attract prospective buyers. The first examples were introduced by various colonization companies during the 1880s. One of the earliest firms was the Qu'Appelle Valley Farming Company, which acquired 64 000 acres near Indian Head in the early 1880s with the intention of establishing 300 tenant farms, "each with dwelling house, stabling and shedding."[11] A model farm, called the Bell Farm after its manager, was established in 1882 to serve as the core of the settlement, and 22 individual cottages, each containing five rooms

and measuring 26 feet by 30 feet, were erected for married couples.[12] However, the project proved unsuccessful and the 300 farms failed to materialize.

Other attempts launched during the 1880s did not fare much better. At the Churchbridge Colony, sponsored by the Anglican Church's Churchbridge Colonization Land Society and located near present-day Saltcoats, Saskatchewan, prospective British colonists were offered rudimentary wooden houses and 40-acre tracts, portions of which were broken and sown, as part of the society's objective to "not collect and dispatch numbers of men, women and children to the colonies and leave them to shift for themselves."[13] The houses, 16 feet by 14 feet and containing two rooms and a cellar, were described as "small but comfortable" (Fig. 33). The nearby Commercial Colony, administered by the Commercial Colonization Company of Manitoba Limited, was based on motives of profit rather than philanthropy. It offered settlers prebuilt houses and the necessary supplies to start farming, and in return, settlers were obliged to post bonds on these assets, paying interest on the outstanding debt. "It is purely a business transaction, profitable alike to borrower and lender, and it is a transaction that must give many men just such a chance as will open the way for them to success and honorable independence."[14]

Perhaps the most rudimentary "ready-made" accommodations were those offered at the Scottish Crofter Colony, also located near Saltcoats, in 1889–90. In this instance settlers were offered a choice of designs for sod huts lined with wood and roofed with tar paper. A carpenter would assist the crofter in building his house with materials purchased at Saltcoats. A basic model, the "McKay House Number 99," was offered for $78, while a smaller version, the "New Shanty Number 50," could be obtained for as little as $50.[15]

Like the sectional prefabs offered to settlers during the 1880s, colonization companies' prebuilt houses offered no guarantee of quality. Most were built under contract by Winnipeg-based firms at minimal cost. In fact, the precarious financial situation of the early colonization companies (all soon collapsed after failing to attract more than a handful of settlers) likely ensured that construction was of a very low standard. One settler in Assiniboia described a 16-by-20-foot house built by a Winnipeg firm as having no interior finish, "just studs and two-ply lumber with tar paper between ... when we took over, it was one large room and an attic ... we built a sod house, and [it] was much warmer than the frame."[16]

33 "Colonists House No. 3, 16 x 14 feet, one room down and one up-stairs, cellar with trap door," built 1887–88 near Winnipeg by the Anglican Church's Churchbridge Colonization Land Company. "Total cost $235."
Manitoba Archives; "Successful Colonies," *The Nor'-West Farmer*, Sept. 1888, p. 243; by permission of *Country Guide* magazine

Colonization companies occasionally erected ready-made houses and barns after 1900, but these ventures seem to have been limited in scale and duration. One example was the Winnipeg-based William Pearson Company, which constructed a number of houses and barns in the Touchwood Hills district of Saskatchewan in 1912 (Fig. 34).[17]

A number of companies established demonstration farms within the land blocks they were promoting as a means of encouraging sales (Fig. 35). Such farms provided local settlers with possible building models, but otherwise the companies were not involved in construction activities. For the most part, land companies had little incentive to invest in buildings in what had become a sellers' market for farmland. Besides, the added cost of prebuilt accommodations raised homestead prices beyond most settlers' means.

There was one major exception to the rather checkered record of ready-made-farm promotions. In 1909 the CPR launched a program offering prebuilt farms in order to promote the settlement of its Eastern Irrigation District in southeastern Alberta. The CPR ready-made-farm program differed radically in concept and scale from its predecessors. Its objective was to establish stable, high-density farming communities in the Alberta Dry Belt where the company had constructed a vast irrigation system containing dams, aqueducts, and over 2000 miles of canals by 1910. Colonies of ready-made farms varying from 80 to 250 acres were to be offered to British settlers at attractive rates. The company's initial objective was to settle between 30 000 and 40 000 selected farmers on ready-made farms, thus establishing a firm agricultural economy in the region.[18] Each settler was provided with a house, barn, outbuildings, a well, fencing, and necessary farm implements. (In some cases a settler could select a site and the plans he wanted; in other cases he could choose a farm with buildings already constructed.) In addition, the company ploughed and sowed up to 50 acres "so as to have a crop available in a few months after the colonist takes possession of the land":

> The total cost of providing the necessary buildings, fencing and other improvements, preparing the crop and boring a well ... is added to the regular list price of the land, and the settler is given the opportunity of repaying the amount in 10 equal annual instalments, with the usual rate of interest on the unpaid balance. The colonists are settled in units of from 12 to fifty families. Friends and relatives may, in this way, arrange to locate close together.[19]

The total cost of all buildings and improvements to the land was initially intended to be under $1500.

The CPR's Colonization Department produced a series of standard plans for houses, barns, and various outbuildings from which the prospective settler could select those most appropriate to his needs and means. At least six house models were available. The majority were compact one-storey buildings that contained four rooms — a living room, kitchen, and two bedrooms — plus an open verandah. In the smallest model, "Standard House No. 1a," these four rooms were squeezed into a small hip-roofed cottage measuring 20 by 24½ feet and costing $900. In "Standard House No. 6" the same four rooms were considerably larger and a sizeable pantry was added (*see* Figs. 97, 98). The estimated cost of this building was $1000. In all the house designs the chimney and stove were centrally located to maximize heat circulation, and hallways and vestibules were omitted. Externally the houses were plain, with main walls covered with clapboard, and roofs and gable-ends covered with wood shingles. Houses, barns, sheds, and even privies were meticulously designed: the mixed clapboard and shingle siding of the houses was repeated on the other buildings, which were painted to match or complement the houses (Figs. 36, 37).

Construction of the buildings appears to have been contracted to private firms, frequently the Calgary-based Hayden and Skene Company.[20] The CPR may also have employed sectional prefabs for some of the farms: company correspondence records negotiations in 1913 with the Vancouver-based Prudential Builders Company, inheritors of the B.C. Mills prefab system, for the supply of buildings for the ready-made farm program.[21]

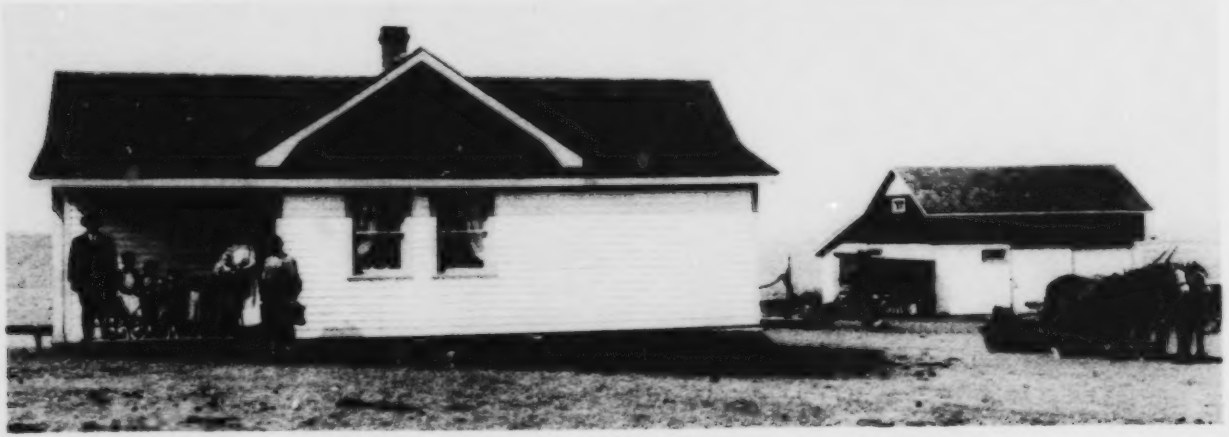
The program was launched in 1909 with the establishment of the Nightingale Colony, which contained 24 farms. Other colonies ranging in size from 5 to 122 farms followed between 1910 and 1914, raising the total number of ready-made farms to 333 by the end of 1914.[22] Despite a $25 000 advertising campaign in British newspapers, the ready-made farms failed to attract the expected rush of applicants; just two thousand had responded by 1912.[23] This was attributed to the stipulation that eligible candidates must be married men with farming experience and a £250 downpayment.

The most publicized of the British colonies was the Duchess Settlement, which the CPR established on behalf of the duke of Sutherland to

34 A ready-made farmhouse under construction by the Winnipeg-based Pearson Company in Saskatchewan's Touchwood Hills.
Saskatchewan Archives Board, Photograph No. R-A14,464

35 "Colonization Farm No. 1," established in 1906 by the Canadian Pacific Irrigation Company at Beiseker, Alberta.
Glenbow Archives, Calgary, NA-4079-5

36 CPR ready-made farmhouse No. 1A and barn No. 7.
Glenbow Archives, Calgary, NA-2829-6



37 CPR ready-made farmhouse No. 6 and barn No. 1.
Glenbow Archives, Calgary, NA-2829-18

accommodate displaced tenants from his Scottish estate. The duke's proposal called for the development of a cluster of small plain farms around a large central farm on which a substantial summer residence would be built for him.[24] Of those British colonists actually placed on ready-made farms, the majority proved to be unsuccessful farmers and had abandoned their land by 1914. The farms were subsequently resold, mainly to settlers from the American Midwest.

In 1913 the CPR shifted its advertising campaign from Britain to various European countries and began preparing additional colonies for the expected influx, only to have these plans interrupted by the war. This diverted the focus of ready-made-farm sales to the U.S., where the railway waged an extensive pamphlet and newspaper campaign to attract experienced farmers. Previously, in 1912, a variation of the ready-made-farm program had been aimed at experienced but impoverished tenant farmers of the American Midwest. Terms for farms built under the "loan to settlers program," as this parallel scheme was called, differed from those for ready-made farms principally in financial arrangements and in the fact that loan farms did not feature pre-ploughed and seeded fields. Occupants of loan farms were not required to make any payments for three years; in the interim they occupied and worked the land as tenants. Ready-made-farm purchasers, on the other hand, had to make downpayments upon occupancy.[25] The CPR's mortgage plans for new farms were innovative by the standards of the time and became increasingly lenient over the years (mainly due to purchasers' frequent inability to meet their payments). In 1912 the firm extended the length of its mortgages from 10 to 20 years, and in 1930 replaced them with a 34-year amortization plan in an effort to curb widespread defaulting.[26]

Construction of ready-made-farm colonies continued until 1919 without interruption. Most appear to have been settled by Americans and, from 1916 onwards, by Canadian war veterans, although European settlers were again solicited at the end of the war.[27] By 1919 a total of 762 ready-made farms had been established, primarily in 24 colonies scattered across southern and central Alberta; 419 loan farms had also been built by this date.[28] However, for its later colonies (those begun during and after the First World War) the CPR apparently dropped its initial selection of house and barn designs in favour of simpler, more nondescript structures. Farmhouses in the later colonies were diminutive one-and-one-half-storey structures that closely followed plans used for numerous settlers' houses in the previous decade, although the chimney remained centrally located. Barns and stables were similarly nondescript in appearance (Fig. 38). This shift in design policy likely reflected the low success rate of the earlier colonies and a corresponding attempt to reduce costs and offer rudimentary farms to immigrants with extremely limited means as well as to government-sponsored war veterans.

The ready-made-farm program was revived during the 1920s. Additional farms were also established under the loan plan, 100 farms were prepared under agreement with the Overseas Settlement Committee, and an additional 120 were built at the Clan Donald Colony near Vermilion, Alberta, in a joint project with the Hudson's Bay Company begun in 1926.[29] An estimated 1662 farms, covering approximately 300 000 acres of land, were sold and settled by the CPR under its various assisted-settlement programs. While this was a far cry from the numbers the CPR had envisaged (indeed the CPR ultimately regarded the program as a failure), it remained a remarkable and unparalleled achievement in terms of assisted settlement.[30]

The CPR's ready-made farms are of additional interest in the context of farm building construction on the Prairies. The company's intermittent conflict with lumber manufacturers and retailers over the cost and distribution of building supplies on the Prairies had culminated in 1904 in its threat to establish its own milling and distribution network, and while it likely did not intend to carry out its threat, its sensitivity to the vital connection between abundant and reasonably priced lumber and successful settlement was the principal reason for its opposition to cartels that threatened to control the lumber trade. Moreover, development of irrigation systems in Alberta represented a major investment by the CPR, one that it intended to recoup through the revenues generated by a prosperous agricultural economy. By controlling virtually all aspects of the settlement — from selecting settlers on the basis of farming experience rather than financial means to designing and providing comfortable and efficient accommodation — the CPR believed it could ensure the success of its venture. The CPR was at the forefront of an increasing awareness of the correlation between the quality of accommodation and the stability of agricultural settlement. It summarized this concern in a 1911 pamphlet promoting settlement in the irrigation district:

> However important the business side of the farm may appear, it is not more important than the creation of an attractive and

38 A "second generation" CPR ready-made farm near Brooks, Alberta, 1920.
Provincial Archives of Alberta, H. Pollard Collection, P591

> comfortable home, surrounded by tasteful grounds and garden and sheltered by beautiful trees and shrubs. In other words, a home where boys and girls will be satisfied to remain. The besetting sin of the average colonist is his disregard for surroundings. Every settler should make up his mind to create not alone a prosperous farming business but also a tasteful and comfortable home.[31]

Underlying the ready-made-farm concept was the notion that the design, placement, and construction of suitable buildings was beyond the average settlers' abilities, and perhaps because of the low success rates of its earlier colonies, the CPR attempted to regulate farming as well. By 1916 each colony included a "central control farm" owned by the company and managed by a "colony superintendent."

> The colonist's operations on his own land shall be carried on under the advice and with the approval of the Colony Superintendent. Central Control Farms shall be used for purposes of demonstration, as supply depots for male livestock required by the colonists, and for the farming implements to be used by the colonists in common.[32]

On the surface this degree of regulation seems the anthithesis of the notion of independence popularly associated with homesteading, and in-

deed it may have been a factor in the ready-made-farm program's failure to attract more applicants. But it is a clear reminder of the economic realities of settlement on the Canadian Prairies. The farmer was perceived (even if he didn't choose to view himself this way) as both primary producer and primary consumer within a broad economic scheme. Nowhere was this more evident than in the CPR's assisted-settlement program.

Buildings by Mail

The most important challenge to the existing retail lumber marketing structure came from mail-order firms that began to appear on the Prairies around 1905. While novel to western Canada, these firms were modelled on ones that had been flourishing in the American West for several years.[33] Perhaps the most successful early American model was Sears-Roebuck, the giant mail-order firm that began selling building materials by mail around the turn of the century, then introduced house kits in 1908.[34] Mail-order marketing was very much a by-product of the development of telephone and telegraph communications in conjunction with railways' rapid delivery capabilities. In rural areas it was a revolutionary development, giving farm families access to a range of consumer goods previously available only in cities.

Mail-order firms began advertising in farm journals, offering carload lots of lumber, shipped directly from B.C. or Ontario mills, at wholesale prices. Farmers were urged to get together with neighbours to purchase one or more carloads. By 1910, building packages for complete houses, barns, and outbuildings were being advertised by mail-order firms at costs they claimed to be far lower than comparable buildings constructed from locally purchased materials. Unlike prefab kits in which wall panels were pre-manufactured, mail-order packages simply contained the necessary lumber, along with other components including sashes, doors, roofing, and hardware. Some versions offered the attraction of precut lumber, which eliminated waste and simplified construction; these were usually advertised as ready-cuts or precuts to distinguish them from the more rudimentary kits containing uncut materials.

The opening of the mail-order market for buildings attracted a variety of firms from across the country. Among the first to advertise in farm journals were the Lake Lumber Company of Winnipeg, the Whaley Western Company and Crown Realty and Brokerage Company of Moose Jaw, Prairie Builders Limited of Calgary, the Sovereign Construction Company of Toronto, and the Vancouver-based Prudential Builders Limited. Some early firms appear to have been wholesalers who contracted B.C. Mills to assemble building packages (precut or uncut) according to prescribed plans and specifications. Other firms entering the rural mail-order field were arms of larger companies with interests in manufacturing, mortgage financing, and real estate operations geared primarily to urban and suburban tract development (Fig. 39).

The best-known entrant, and one of the earliest, in the mail-order building trade was the T. Eaton Company, which began including building materials and house packages patterned on American models in its 1910 catalogue. Eaton's became a frequent advertiser in farm journals. A full-page ad in *The Grain Growers' Guide* of 5 January 1910 offered the farmer a choice of either plans, specifications, and materials for an eight-room house, all for $734, or a carload lot of lumber. Both choices were shipped direct from the manufacturer at wholesale prices.[35]

Eaton's 1911 building selection consisted of five dwellings, ranging from a 12-foot-by-18-foot homesteader's shack costing $165 to a two-storey, 28-foot-by-40-foot house with a price tag of $1025, and a small gable-roofed barn for $337 (Fig. 40). Quoted prices included all lumber, lath, shingles, windows, doors, mouldings, exterior paint, nails, hardware, and building paper. All lumber was "fir and cedar ... cut on the British Columbia Coast, and properly seasoned before shipment."[36] All houses were "of frame construction, with one-ply of No. 1 Shiplap, paper, and No. 1 clear Bevel Siding on the outside; on the inside one-ply of No. 1 Shiplap, paper, strapping, and lath and plaster, giving two air spaces." By 1914 Eaton's had expanded its selection and began publishing a separate, 80-page catalogue of house and barn plans that was obtainable free of charge from its Winnipeg-based service department.[37] (The building catalogue was phased out in the 1930s.) Diagrams illustrated Eaton's house construction (Fig. 41). The designs varied considerably in scale and appearance, and featured a variety of roof treatments, including simple gable and hip roofs as well as distinctive cross-gable and cross-gambrel designs (Figs. 42, 43). Most plans were compact squares or rectangles with minimal projections apart from occasional bay windows, rear porches, or front verandahs — obvious concessions to heating considerations and ease of construction. No features stand out as

SEND FOR BOOK OF PLANS

A Man, a Hammer and a Ready-Cut Home

If you were given hammer and nails, all the lumber cut to size, and complete plans and instructions, you could build a garden seat, or a table, or a summer house, couldn't you?

Building your own home the Ready-Cut way is the same thing on a bigger scale, just as simple.

Every piece of lumber is cut to exact size and marked so that you can slip it right into place—the same way with window sashes, doors, interior hardware and stair-cases.

It is simple as A B C. Our homebuilders' book explains everything—how the lumber, all cut to size, is shipped in bundles, together with all necessary material except foundations and other masonry.

The book explains how by buying direct from the mill you save all middlemen's profits—you eliminate all charges that add nothing to the value of the home—consequently the completed house costs one third less than it otherwise would.

You will find in the book photographs and floor plans of 60 different homes at prices to suit all purses.

As a prospective home builder you need this invaluable book. Ask for book No. 74.

Sovereign Construction Co., Limited
1374 C.P.R. Building,
TORONTO - - ONT. 81

39 A typical mail-order house ad appearing in Prairie farm journals from 1910 onwards.
The Farmer's Advocate and Home Journal, Vol. 48, No. 1084 (2 July 1913), p. 1072A

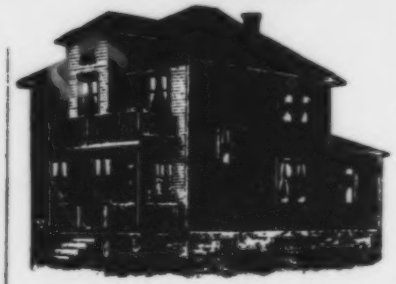
unmistakable trademarks of Eaton's houses, although the inclusion of features such as bay windows, decorative dormers, and shingled upper storeys and gable-ends offer clues in identifying examples. (Eaton's also offered a custom design service for customers who did not wish to use the catalogue plans, and this meant that house kits purchased from Eaton's could differ considerably from the stock designs.)

Eaton's quickly dropped the small homesteaders' cabins and barn featured in its 1911 catalogue and concentrated on the market for larger, permanent buildings with one notable exception: a 1919 special catalogue containing plans for simple cabins and lean-to barns based on designs prepared by the Soldiers' Settlement Board (Figs. 44, 45). The plans were part of four complete homesteading packages offered through Eaton's to veterans taking advantage of the federal government's soldier-settlement scheme. Each package contained a selection of furnishings, tools, and implements in addition to the buildings.[38]

Eaton's standard building catalogues contained a range of plans for barns, sheds, granaries, and even one-room schools, in addition to house designs. As in the case of the firm's house plans, no features readily identify them as Eaton's products (Fig. 46). A barn listed in the 1917–18 *Building Supplies Catalogue* was touted as having taken first prize at the 1914 Winnipeg Exhibition; the firm seems to have acquired the rights to reproduce the winner's plan.[39]

Lumber Direct from the Mills at Lowest Prices

NINE-ROOMED HOUSE



Size 28x40. Compact and easy to heat.

44K200. EATON price for the material, including Rough Lumber, Siding, Flooring, Finishing, Mouldings, Windows, Doors, Window and Door Frames, Lath and Shingles, including Plans and full Specifications complete, freight paid to most stations..... **1,025.00**

44K201. Plans and Specifications..... **2.50**

If Lumber is ordered, we refund the price of Plans.

FIVE ROOMS—WARM AND HOMELIKE

Five-Roomed House, size 22x28

44K202. EATON price, complete for all necessary Lumber, Windows and Doors, Window and Door Frames, Mouldings, Building Paper, Lath and Shingles, and also Plans and Specifications, freight paid to most stations. Price.. **645.00**

44K203. Plans and Specifications, if ordered separately..... **2.50**

If Lumber is ordered, the price of Plans will be refunded.

We supply both fir and cedar lumber cut on the British Columbia Coast, and properly seasoned before shipment. We guarantee all our lumber to be fully up to standard.

To secure the advantage of our low prices, we require an order for at least 16,000 feet of lumber, which makes a carload. If necessary get your neighbor to join with you in ordering.

If you can place an order for at least a carload of lumber it will pay you to write us for our price on the necessary material for any buildings you may contemplate erecting. When writing, send us your bill of material. If you have no bill of material, send us a plan or rough sketch, showing the dimensions or layout of proposed buildings. We will reply by early mail giving you our prices, including freight charges to your nearest station.

For the convenience of our customers, we have prepared some ready-made plans for several standard houses and barns. Particulars of these are shown on this page, also the cost of all lumber entering into their construction. You may order the plans first at the small cost of $2.50, and then if you send us your order for the lumber called for in the plans, we will refund price of the plans. We do not draw plans of special order. The only plans we have for sale are described below.

The prices named below for houses and barns include freight to stations between the Rockies and Winnipeg, with the exception of Northern Saskatchewan and Manitoba. To such points, we shall be pleased to quote special prices on application.

We reserve the right to lower or raise our prices of lumber, in accordance with market fluctuations. We cannot guarantee the prices quoted below, as we can only give a price based on present market figures. Before ordering, write us, and we will give you the lowest possible prices applying at that time.

All our houses are of frame construction, with one-ply of No. 1 Shiplap, paper, and No. 1 clear Bevel Siding on the outside; on the inside one-ply of No 1 Shiplap, paper, strapping, and lath and plaster, giving two air spaces. For lining floor, No. 1 Shiplap is used, and No. 1 Fir Flooring for finishing floors. No. 1 Shiplap, paper and No. 1 XXX Red Cedar Shingles for roof.

HOMESTEAD COTTAGE

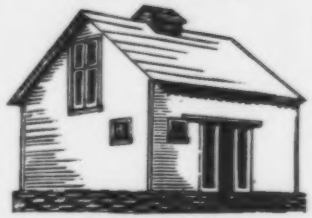
Four-Roomed Cottage, size 22 ft. 4 ins. x 26 ft. 4 ins.

44K204. Our price includes all the necessary Lumber, both common and finishing; Windows and Doors, Window and Door Frames, Casing, Mouldings, Lath and Building Paper, also complete Plans and Specifications. The price of material for Cottage, freight paid to most stations is..... **404.00**

44K205. Plans, Specifications and Bill of Material for above Cottage..... **2.50**

If Lumber is ordered, we refund price of Plans.

HOMESTEAD BARN



Square Pitched Roof Barn, 36 ft. 6 ins. x 40 ft., with 12-ft. posts. Barn is sheeted with Shiplap, Tar Paper and Drop Siding to height of stable. Above stable line Drop Siding only.

44K206. Our price for No. 1 quality Lumber, Shingles, Barn Sash, Doors and Tar Paper, with Plans, Specifications and Bill of Material, freight paid to most stations, is..... **337.00**

44K207. Plans, Specifications and Bill of Material for this Barn..... **2.50**

Price of Plans refunded on receipt of Lumber order.

The material for a Homestead Cottage or Homestead Barn makes only about a half carload. As our price is conditional on a carload order, it is necessary to order the material for two cottages or two barns, or for one cottage and one barn.

SENSIBLE EIGHT-ROOMED HOUSE

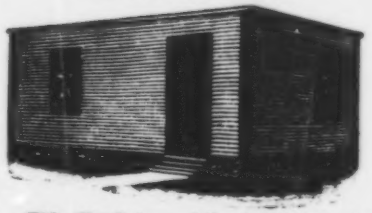
Eight-Roomed House, 22 x 28. A warm and well-lighted house, attractive in appearance, and a most desirable country home.

44K208. EATON price for all necessary Rough Lumber, Siding, Floorings, Mouldings, Windows and Doors, Window and Door Frames, Shingles and Lath and Building Paper, including Plans, Specifications and Bill of Material, freight paid to most stations..... **895.00**

44K209. Plans, Specifications and Bill of Material..... **2.50**

If Lumber is ordered, price of Plans will be refunded.

HOMESTEADER'S SHACK



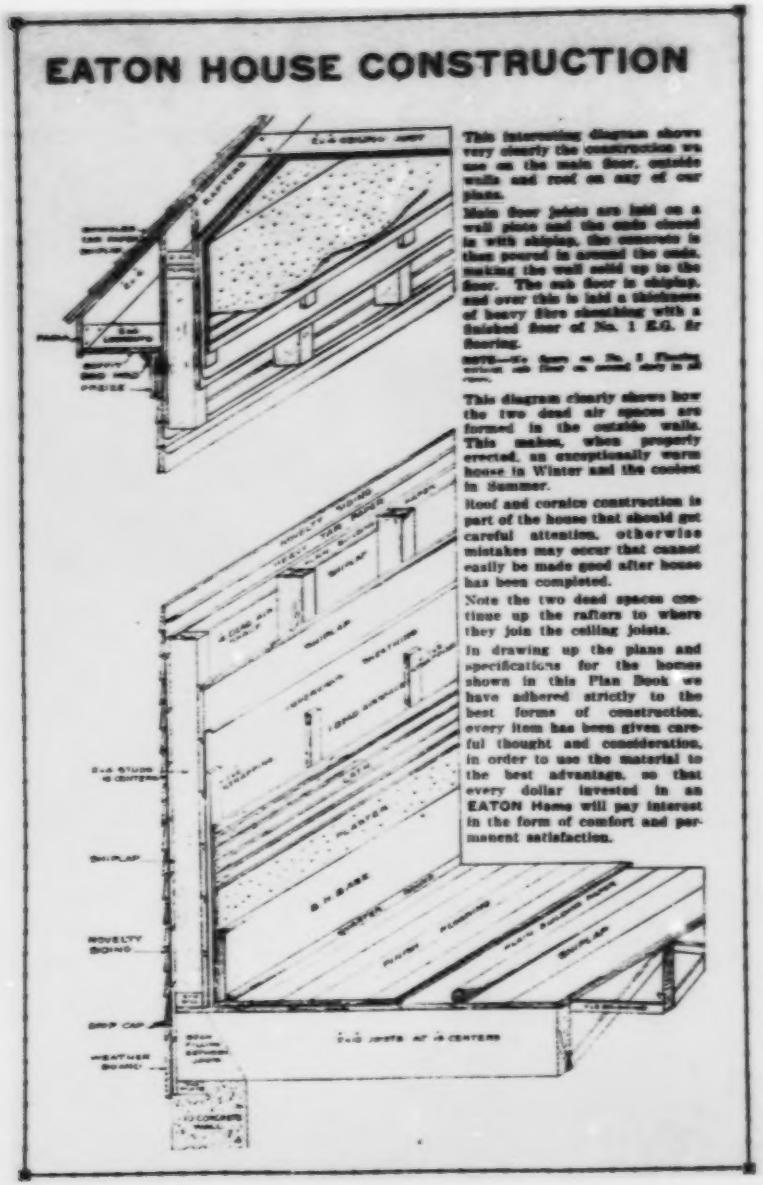
This Shack is specially designed for the homesteader, is built in sections, and can be put up in a day. It measures 12 x 18 feet, with 8-foot ceiling. Has double floors, with building paper between. The top floor is of matched lumber. The wall construction is as follows: Matched siding outside, then building paper, shiplap, building paper on studs, 4-in. air space, then sheeting and building paper inside. Roof is shiplap covered with building paper and prepared 7-year roofing. Weight of material 4500 pounds, at third-class freight rate, if shipped singly. If four are shipped at once, the low carload rate of freight is obtained.

44K210. EATON price for Shack complete, including Windows, Doors, Hardware, Nails and Paint. f. o. b. Winnipeg **168.00**

(F. O. B. Winnipeg means that the purchaser pays freight from Winnipeg.)

40 Materials and plans offered in Eaton's *Fall and Winter Catalogue, 1911–12,* Winnipeg edition, p. 259.

The Eaton Collection at the Archives of Ontario

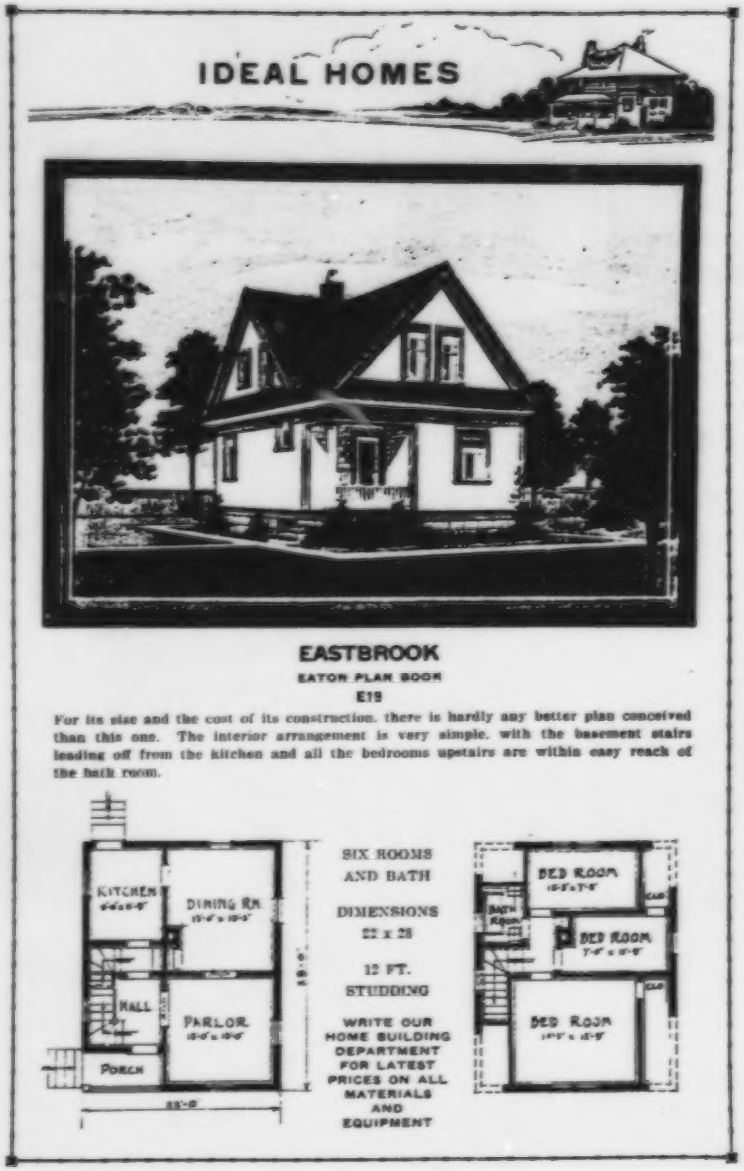

EATON HOUSE CONSTRUCTION
This interesting diagram shows very clearly the construction we use on the main floor, outside walls and roof on any of our plans.
Main floor joists are laid on a wall plate and the ends closed in with shiplap, the concrete is then poured in around the ends, making the wall solid up to the floor. The sub floor is shiplap, and over this is laid a thickness of heavy fibre sheathing with a finished floor of No. 1 E.G. fir flooring.
This diagram clearly shows how the two dead air spaces are formed in the outside walls. This makes, when properly erected, an exceptionally warm house in Winter and the coolest in Summer.
Roof and cornice construction is part of the house that should get careful attention, otherwise mistakes may occur that cannot easily be made good after house has been completed.
Note the two dead spaces continue up the rafters to where they join the ceiling joists.
In drawing up the plans and specifications for the homes shown in this Plan Book we have adhered strictly to the best forms of construction, every item has been given careful thought and consideration, in order to use the material to the best advantage, so that every dollar invested in an EATON Home will pay interest in the form of comfort and permanent satisfaction.

Eaton's mail-order buildings differed from precut mail-order products appearing on the market around 1910 in one major respect: its packages simply contained plans, specifications, and necessary materials. The purchaser might realize a saving over locally purchased materials and avoid problems of design and specifications, but he was still faced with the normal building process and possibly having to find and hire skilled labour. And unlike some of its ready-cut competitors or American counterparts, Eaton's never offered mortgages or time-payment plans to its customers.

Precut packages, on the other hand, claimed to offer the farmer the opportunity of constructing his house in a minimum amount of time and without a carpenter's aid. Ads for "Readi-Cut Houses, Built in A Day," which their manufacturers went to great lengths to extoll, held obvious attractions for rural dwellers. In 1911 The National Finance Company of Vancouver promoted its ready-cut West Coast bungalow in *The Grain Growers' Guide*. Selling points of the "Vancouver" model (Fig. 47) were a picturesque appearance featuring "a Full Six foot Verandah ... Exposed Brackets and Rafters ... [and] a balcony on [the] second floor."[40] (National Finance had acquired the rights to the patented B.C. Mills panel system in 1910 and attempted to adapt it to designs of this type.) A 1910 ad for the Crown Realty and Brokerage Company of Moose Jaw read:

> You know exactly what your completed house will cost; there are no extras; You know exactly what your completed house will look like. We show you photographs.... You save several months' time, for we ship from our factory the same day that the order is received.... You can do all the work yourself easily; for we furnish such complete instructions and illustrations that you will need no assistance from skilled labor in any part of the work.... You can get the best grade of material ... at less price for the completed house than you can buy rough lumber.[41]

41 The method of construction used for Eaton's mail-order houses.
T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 7; The Eaton Collection at the Archives of Ontario


IDEAL HOMES
EASTBROOK
EATON PLAN BOOK
E19
For its size and the cost of its construction, there is hardly any better plan conceived than this one. The interior arrangement is very simple, with the basement stairs leading off from the kitchen and all the bedrooms upstairs are within easy reach of the bath room.
KITCHEN
DINING RM
HALL
PARLOR
PORCH
SIX ROOMS AND BATH
DIMENSIONS 22 x 28
12 FT. STUDDING
WRITE OUR HOME BUILDING DEPARTMENT FOR LATEST PRICES ON ALL MATERIALS AND EQUIPMENT
BED ROOM
BATH Room
BED ROOM
BED ROOM

42 The Eastbrook, a design from Eaton's 1919 house catalogue. The majority of the firm's standard house plans were for compact and one-and-one-half-storey residences such as this.

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 17; The Eaton Collection at the Archives of Ontario

43 The plans for this farmhouse at Delisle, Saskatchewan, appear in Eaton's 1917 catalogue as "Modern Home No. 663." Like many Eaton's designs, it features a square layout, in this case modified by a front verandah, rear porch, and side bay. One of the firm's smallest designs, it measures just 22 feet square, excluding the verandah, and cost $833.81 for materials. It was especially suitable "for young housekeepers — beginners in matrimony and a dandy plan for a couple just starting to make their first home."

CIHB, 1974

HOUSE, Type "B"—Designed by Soldier Settlement Board. (For illustration see page 19.)

Size 24 ft. x 14 ft. x 8 ft., ceiling 9 ft. 6 ins. high. This house is an enlargement of Type "A," and contains a living-room, size 10 ft. x 13 ft. 4 ins., kitchen, size 6 ft. 2 ins. x 7 ft., bedroom, size 7 ft. 2 ins. x 11 ft. 2 ins., also vestibule, size 6 ft. 2 ins. x 3 ft. 7 ins. There are four closed closets, and ample space for hats and coats.

Room measurements given are taken between the walls each way. This building is designed to have concrete surface foundations with cellar in the centre portion, or cedar post foundation and excavated basement similar to Type "A." An outside entrance is provided to cellar at the back of house; access to cellar may be also made by the trap door in kitchen floor.

Stock materials are specified, and the building is constructed in a similar manner as Type "A." Government standard flint coated ready roofing is provided as the exterior finish. This material is supplied in separate colors for roof and wall covering, and properly applied is wind-tight. The two colors make a very neat looking house. Wood trimming for the exterior is also specified.

This building is fully described by the Government plans and specifications.

Price and Detailed Specification supplied by Soldier Settlement Board.

BARN—Designed by Soldier Settlement Board. (For illustration see page 19.)

Size 12 ft. by 24 ft., lean-to style, accommodating four horses and two cattle. Height 9 ft. in front, 8 ft. at rear.

A very convenient barn for the settler who requires this accommodation. The stalls are divided with 2-inch plank partition, and 2 inch plank material is supplied for mangers.

The whole building is to be set on tire or pad stones, to form a good foundation. The studs and rafters are spaced at 18-inch centres, making a substantial building for the purposes intended. All materials are standard, and no difficulty will be experienced in erecting this barn. Three to four days should be sufficient time for any man handy with carpentry tools.

Ample light and ventilation is provided for, and a small manure door at the end of litter way is very convenient for cleaning out.

The Government specifications call for dependable lumber. The barn will be roofed with Government standard flint coated ready roofing.

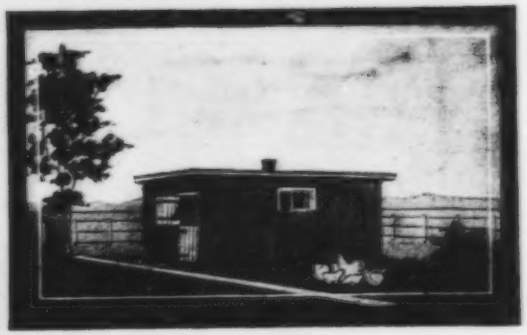
Price and Detailed Specification supplied by Soldier Settlement Board.

44 House "Type B" and barn, part of the package Soldiers' Farm Equipment No. 2 in Eaton's special 1919 catalogue for the veterans' settlement programme.

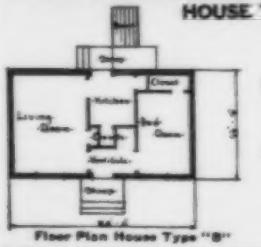
T. Eaton Company, *Farm Buildings and Equipment — Soldiers' Land Settlement Scheme* (Winnipeg: 1919), p. 5; The Eaton Collection at the Archives of Ontario

SOLDIERS' FARM EQUIPMENT No. 2

HOUSE TYPE "B"



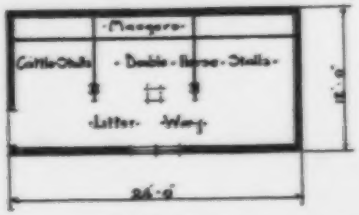
BARN



Floor Plan House Type "B"

Drawings and plans of buildings designed by the Soldier Settlement Board.

Prices and detailed specifications supplied by the Soldier Settlement Board.



Floor Plan Barn

PRICES QUOTED IN THIS BOOK REMAIN IN EFFECT UNTIL JULY 30th, 1919

45 Drawing and plans of house "Type B" and barn, part of an Eaton's farm equipment package for veterans.

T. Eaton Company, *Farm Buildings and Equipment — Soldiers' Land Settlement Scheme* (Winnipeg: 1919), p. 18; The Eaton Collection at the Archives of Ontario

Promises like these made ready-cuts sound like the solution to farmers' building problems; however, companies selling early packages of this type proved to have short life spans. Firms established before the war did not survive the economic slump of 1914–15, but were soon replaced by other firms offering similar products. The majority had mills and cutting plants located in the Vancouver area, although their marketing headquarters might be located in Prairie cities or even Toronto.

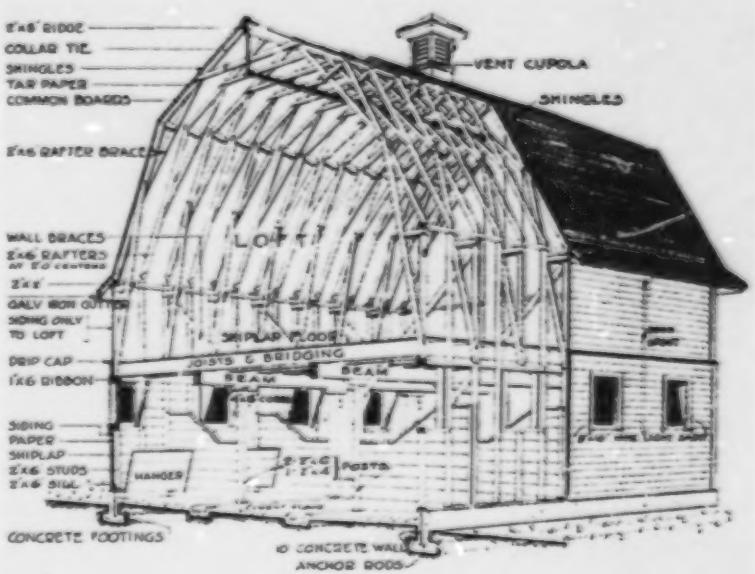
An occasional advertiser in farm journals between 1916 and 1918 was the Twentieth Century Ready Cut House Company of Vancouver, which offered an extensive line of houses, barns, and outbuildings. Like Eaton's designs, this firm's selections ranged from low-cost models to substantial eight-room houses. Included were a wide range of bungalows, reflecting that style's current popularity on the West Coast, and a number of the firm's residential designs were specifically intended to meet Prairie farmers' requirements. The "Albion," a two-storey, five-room house, was

> distinctly a farmer's home, and its arrangement is adapted solely to farm life. The kitchen and living room are one, it being desirable in most small farm houses to have one larger room instead of two smaller ones. The stairway takes up as little room as possible, the cellar stairs being under the main stairway. The chimney being centrally located is very handy for stoves and range. The large opening between the kitchen and parlor allows the heat from the kitchen to circulate freely. The bedrooms, while not large, will accommodate two beds.[42]

The firm assured prospective customers that in building a Twentieth Century House, "it is as though you had the use of a clever architect and contractor who knew how to figure without waste — you save over a third of the cost." And, like its competitors, Twentieth Century claimed that it had eliminated the need for skilled labour:

> As practically every part of the Twentieth Century House is cut to fit, and carefully marked as to where it is to go ... any man who can wield a hammer and read simple instructions can erect the building, as included in the purchased price and supplied with each house is a graphic set of architect's plans, on which are given the exact location of every piece of lumber in the building.[43]

Despite the many apparent attractions of Twentieth Century's buildings, it, like its ready-cut predecessors, could not survive market fluctua-



EATON BARN CONSTRUCTION

When we give an estimate on a Barn, we figure for material exactly as shown in this diagram, which shows very clearly the construction of the outside wall up to loft floor, the method of framing rafters, braces, etc. We hope this diagram will be very carefully studied by intending builders, as it has been our experience that this is the easiest erected, requires less lumber, and is the most economical form of construction to withstand conditions in Western Canada.

We design our barns with the correct size sash, fresh air intakes and ventilators, per head of stock, as sunshine and fresh air are the greatest purifiers and health producers that we have. There is no equal as a disease preventative.

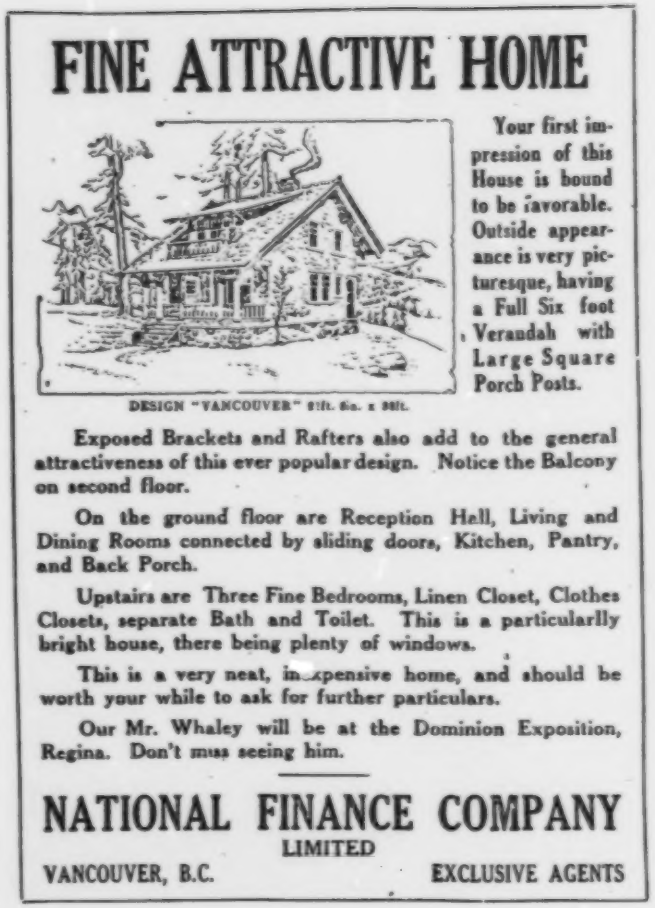
All sash are hinged at the bottom, having guards at the side in order that the cold air will be directed to the ceiling to mingle with the warm air before coming into contact with the stock.

We also show the construction of concrete floors on all of our barn plans —a feature which we strongly advocate—as it stands for cleanliness and health and also saves labor in taking care of stock.

These details all tend toward larger production and better returns for the amount invested.

46 Construction of an Eaton barn. The framing was typical of gambrel-roof barns of the period.

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 39; The Eaton Collection at the Archives of Ontario



FINE ATTRACTIVE HOME

DESIGN "VANCOUVER" 21ft. 6in. x 38ft.

Your first impression of this House is bound to be favorable. Outside appearance is very picturesque, having a Full Six foot Verandah with Large Square Porch Posts.

Exposed Brackets and Rafters also add to the general attractiveness of this ever popular design. Notice the Balcony on second floor.

On the ground floor are Reception Hall, Living and Dining Rooms connected by sliding doors, Kitchen, Pantry, and Back Porch.

Upstairs are Three Fine Bedrooms, Linen Closet, Clothes Closets, separate Bath and Toilet. This is a particularlly bright house, there being plenty of windows.

This is a very neat, inexpensive home, and should be worth your while to ask for further particulars.

Our Mr. Whaley will be at the Dominion Exposition, Regina. Don't miss seeing him.

NATIONAL FINANCE COMPANY
LIMITED
VANCOUVER, B.C. EXCLUSIVE AGENTS

47 The National Finance Company's ad for its "Vancouver" bungalow.
The Grain Growers' Guide, 2 Aug. 1911, p. 18

tions, presumably due to undercapitalization or insufficient sales. The longevity of such companies seems to have required a broad market base and long-term financing options for purchasers. This likely explains the success of the Aladdin ready-cut homes that first appeared in Canada around 1914. In that year the firm's line of precut house kits started to be marketed in western farm periodicals by the Sovereign Construction Company of Toronto, which had cutting mills located in Toronto, Ottawa, and Vancouver.[44] Sovereign either operated under franchise or was a wholly owned subsidiary of Aladdin Homes, a long-established American company with head offices in Bay City, Michigan.[45] In 1920 Aladdin began marketing its homes under its own name in Canada, and maintained offices in Vancouver and Toronto, with mills in Vancouver, Brantford, Peterborough, Guelph, and Saint John.[46] The breadth of Aladdin's manufacturing facilities was without precedent in Canada at that time. The firm's advertising theme was much the same as those of the Twentieth Century Company and other, earlier ready-cut house manufacturers, but the scale of its market made it less vulnerable to regional fluctuations in demand. As a result Aladdin "Readi-Cut" houses remained familiar commodities across the country for the next five decades (Fig. 48).

5-Room ALADDIN $759
WE PAY THE FREIGHT
You can buy all the materials for a complete home direct from the manufacturer and save four profits on the lumber millwork, hardware and labor.
Attractive Designs—Sturdy Construction, Fine Lumber
Aladdin houses are all built of beautiful clear "A" Cedar siding, high grade doors, flooring and interior woodwork and sound, strong framing. Aladdin's free catalog printed in four colors gives all facts. Send for it today.
SAVE 18% Lumber Waste and 30% on the Labor Cost. PRICES are all Freight Paid to your Railroad Station.
Aladdin's 19 years success
proves that you can do as thousands of other home-builders do every year—save from $200 to $800 by building an Aladdin home. There is an Aladdin near you wherever you live. Go and see one. SAVE money, time and annoyance by ordering all materials from one reliable manufacturer.
Price Includes all lumber cut to fit; high grade interior woodwork, siding, flooring, windows, doors, glass, paints, hardware, nails, roofing, with complete instructions and drawings. FREIGHT PAID to your station. Permanent homes—Not Portable. Many styles to choose from. Write today for FREE Money-Saving Catalog W21
CANADIAN ALADDIN COMPANY, LIMITED
218 Portage Ave., Winnipeg, Man.
Mills Throughout Canada
6 Room ALADDIN—$945
Story-and-Half—$1039
Dutch Colonial—$1347
Semi-Bungalow—$1685

48 A typical ad for Aladdin Readi-Cut houses.
The Saskatchewan Farmer, Vol. 16, No. 2 (Feb. 1925), p. 23

Alternatives: Published Plans and Locally Bought Lumber

Building plans were available to Prairie settlers from an early date in periodicals and plan books. Farming journals frequently reprinted plans for substantial homes and barns borrowed from eastern Canadian or American publications.[1] When the time came to move from the temporary sod or lumber shanty, *The Nor'-West Farmer* of September 1884 advised:

> To those to the manor born and from down east, the two story lumber frame house, of the many and varied styles of architecture well known throughout the Dominion and the States, naturally comes to mind; lumber has the advantage of being very portable, level and square, more readily adapted for building.[2]

As long as western settlements remained concentrated in relatively wooded and moist areas where mixed farming appeared to be tenable, eastern building models continued to frequent the pages of Prairie farm journals. By the end of the 1890s, however, these publications were beginning to acknowledge the need for small, low-cost dwellings, and *The Nor'-West Farmer* began offering a free plan service to its readers.

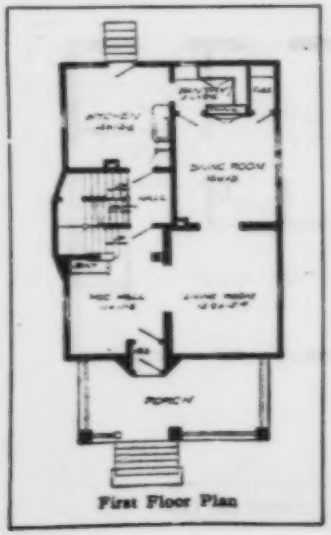
Another important source of building designs were the various plan books, published primarily by American firms. After the turn of the century this market was dominated by three Chicago-based publications: the Hodgson series, prepared by Fred T. Hodgson and published by Frederick J. Drake; *Dustman's Book of Plans*, published by the Charles C. Thompson Company; and the Radford series, published by the Radford Architectural Company. Each firm produced numerous volumes that went through successive editions. The Radford company, for example, offered nine books by 1908, with titles like *The Radford American Homes, Lumberman's House Plan Book, Radford's Bungalow Book,* and *Cement Houses and How to Build Them.* Plan books were intended to function as catalogues, giving illustrations and descriptions of buildings for which blueprints and specifications could be obtained for a fee. In addition, Radford offered an architectural service that prepared "made-to-order" plans from correspondents' sketches, and a separate farm building department, added in 1909, offered a specialized service for farm clients and prepared two publications specifically aimed at the farm market, *Radford's Combined House and Barn Plan Book* and *Radford's Practical Barn Book.*

The plans in the Hodgson, Radford, and Dustman books were widely advertised and reproduced. Hodgson books were sold in Eaton's catalogues, while the *Western Lumberman* occasionally reproduced Dustman's plans for lumber retailers' use.[3] A striking aspect of the American plan books was the multiplicity of designs; plans for every conceivable shape and style of house appeared in their pages, as did considerable overlap. Plans for a cross-gable gambrel-roofed residence appear in Radford and Dustman plan books of 1910 and show up again, with minor variations, in Eaton's catalogue of the same period. Similarly, numerous variations on the "square house" were available in all these publications, reflecting that design's popularity after the turn of the century. Styles such as bungalows were added as they became fashionable. A few years later, when various commercial concerns in western Canada, like the WRLA, adopted plan books, their designs strongly resembled designs in the American publications, suggesting that a lot of design borrowing occurred.

Although a wide range of designs were thus available to Prairie builders, the variety of house plans suitable for most farmers was limited. Large houses with a profusion of bays, wings, and decorative detailing were beyond the means of all but a few. As a consequence, most designs aimed at the farm market were compact and simple. Square or near-square plans with minimal projections became common features of the majority of designs published after 1910 (Fig. 49).

DESIGN NUMBER 6031

Size: width, 25 feet, 6 inches; length, 36 feet, 6 inches, exclusive of porches



First Floor Plan

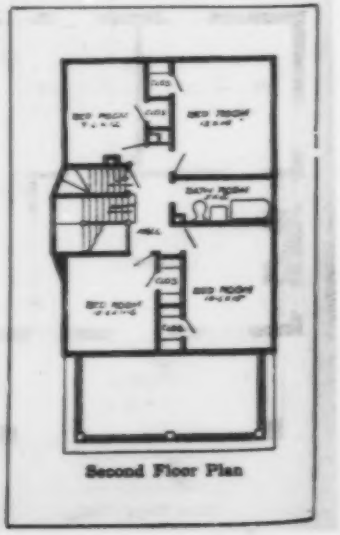
BLUE PRINTS consist of basement plan; roof plan; first and second floor plans; front, rear, two side elevations; wall sections and all necessary interior details. Specifications consist of about twenty pages of typewritten matter.

PRICE

of Blue Prints, together with a complete set of typewritten specifications

ONLY TWELVE DOLLARS

We mail plans and specifications the same day order is received.



Second Floor Plan

49 House plan from Radford's *Combined House and Barn Plan Book* (Chicago: Radford Architectural Co., 1908), [p. 58]. "Blue prints consist of basement plan; roof plan; first and second floor plans; front, rear, two side elevations; wall sections and all necessary interior details. Specifications consist of about twenty pages of typewritten matter. Price of Blue Prints, together with ... specifications only twelve dollars."

Free Plan Campaigns

Although commercial plan books and farm journals began to address Prairie farmers' specific building needs during the first decade of the 1900s, the subject achieved far greater attention and publicity through the efforts of the Manitoba and Saskatchewan agricultural colleges, which mounted free plan brochure campaigns, beginning in 1913. The colleges' involvement in farm building design appears to have been modelled on similar programs initiated by the U.S. Agricultural Department a few years earlier.[4] Agricultural experts and social analysts in both countries began to voice their concerns about farmers' living conditions, particularly in newly settled regions. The production and distribution of free brochures describing good agricultural practice, farm planning, and building construction came to be regarded as an effective method of disseminating information to rural inhabitants, one that provincial and federal government agencies and agricultural colleges adopted.

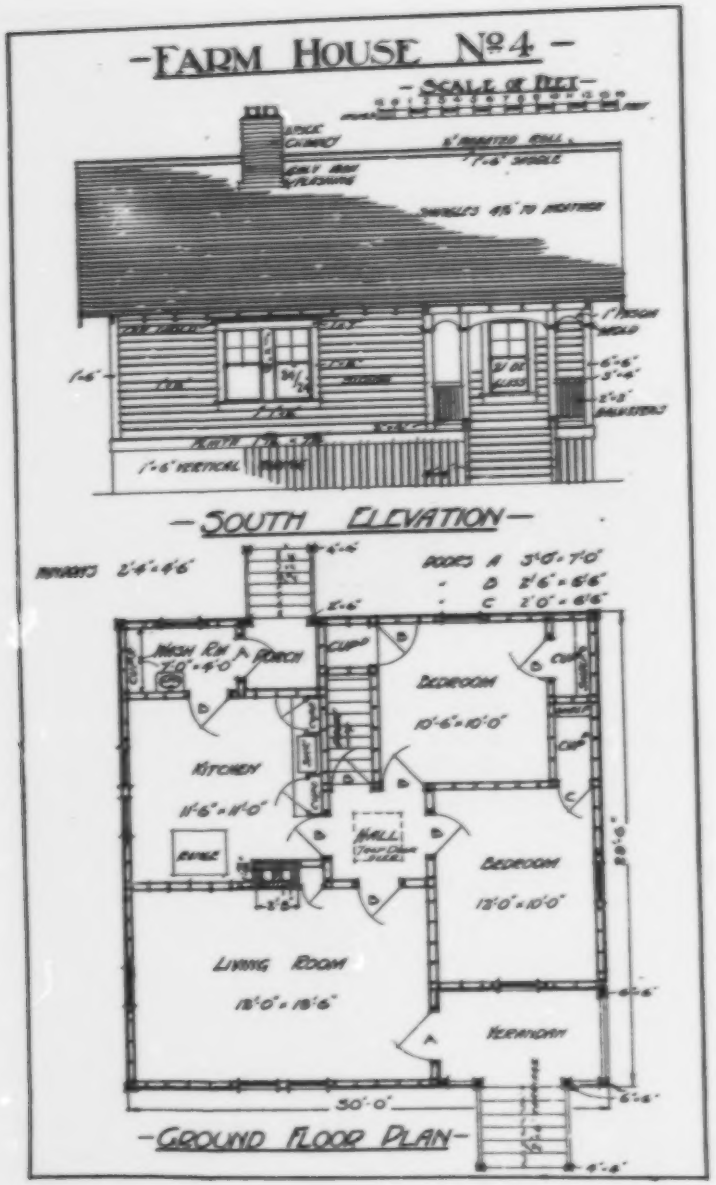
The first free bulletin dealing specifically with Prairie farm buildings was produced by the Manitoba Agricultural College in 1913.[5] Its selection of barn and stable plans was greeted enthusiastically by *The Farmers' Advocate*: "If there has been a popular publication needed on any one phase of farming in this new country, it was on the construction of farm buildings. That want has now been supplied."[6] In the following year the University of Saskatchewan's College of Agriculture began preparing similar plans for farmers in that province. These institutions' interest in farm design coincided with the halt of the settlement boom and a reassessment of Prairie agriculture. Investigations revealed that for many, farming was at best a tenuous existence. A 1917 study of rural conditions conducted by the federal Commission of Conservation found that housing standards on the Prairies were particularly low, with family accommodation often given lower priority than barns, sheds, or implements when it came to expenditures.[7] A new concern was directed towards the plight of the families forced to live in substandard conditions. While much of this concern focused on stabilizing and improving the basis of the agricultural economy, improved housing and farm buildings also became a recognized priority.

The free bulletins produced by the University of Saskatchewan and published by the B.C. Forest Service are of particular interest because of their extensive distribution; an estimated 250 000 copies of this series were distributed between 1915 and 1920. The ten separate bulletins dealt with five types of barns (general purpose, dairy, beef, horse, and sheep), piggeries, poultry houses, implement sheds and granaries, silos and root cellars, and farmhouses. The plans and specifications in each bulletin were intended to be sufficiently detailed to build from, although farmers could obtain large-scale plans at cost by writing to the B.C. Forest Service. All buildings were intended to withstand the Prairie climate, to be simple to build and practical for the average farmer, to use stock sizes of lumber, to be easily enlarged when necessary, and to be easily modified to meet specific needs.[8] Each bulletin contained the rationale for the particular structure being discussed and a list of primary considerations in selecting a design.

A particularly strong pitch was made for implement sheds. Citing the 1917 Commission of Conservation observation that the vast majority of farm implements were left uncovered and unpainted, one bulletin pointed out that

> Proper care in the way of housing and painting would effect a saving on the average Prairie farm of at least 20% or $54.00 each year, and in many cases a great deal more. An implement shed is obviously, therefore, one of the best investments a farmer can make.[9]

Possibly the first comprehensive assessment of suitable house designs for Prairie farms appeared in the tenth bulletin of the University of Saskatchewan series. The kitchen was identified as the most important room and therefore required the most careful planning. In a large house it should be primarily a cooking room, although in small houses it must necessarily serve as a dining — and possibly living — area as well. Builders were advised to locate the kitchen in a corner of the house where it could get ventilation from two sides, one side preferably facing east. The arrangement of cupboards, sink, stove, etc., should be carefully thought out for convenience and minimal footwork. Pantry, dining room, and woodshed should be close to the kitchen. The washroom should be close to the rear entrance to permit the farmer and hired help to have direct access to it without having to walk through the kitchen. Also recommended was a separate entrance to the dining room so the men could move directly from the washroom to it without passing through the kitchen. A bedroom on the ground floor was advised for young children, hired help, or invalids. When hired men were to live in the house, a separate bedroom



that could be shut off from the rest of the house was desirable. While all such suggestions could not be incorporated in small dwellings, they could be borne in mind when planning an initial house and implemented when it was expanded. The six plans in the bulletin demonstrated this approach: three were for small, one-storey structures that could be enlarged later by adding second storeys (Fig. 50).[10]

The detailed descriptions and lists of materials that accompanied each plan clearly indicated what was regarded as optimum frame construction practice for Prairie farm buildings by 1915. Joists and wall studding for large structures such as barns were largely 2-x-6-inch and 2-x-8-inch planks no longer than 16 feet; sizes for smaller buildings, including houses, were 2 x 6 inches and 2 x 4 inches in most cases. The number of layers applied over the wall frames varied according to the type of building. For barns, a layer of shiplap was applied over the frame, then covered with finished exterior siding. On houses, layers of shiplap were applied on inner and outer sides of the frame, followed by a layer of tar paper, then the exterior siding. The standard choice for exterior siding on all farm buildings in the series was flush-faced dropsiding in preference to tapered clapboard. Roofs were covered by successive layers of shiplap, tar paper, and cedar shingles.

The wide distribution of the University of Saskatchewan's bulletins was the result of the involvement of the B.C. government's Forest Service. Since free plan books promoting wood-frame construction were seen as ideal vehicles for remedying the province's sagging lumber sales, each of the ten bulletins contained introductions extolling the virtues of B.C. lumber and the need for continued trade between provinces:

50 Farmhouse No. 4 prepared by the University of Saskatchewan's College of Agriculture and published by the B.C. Forest Service. Plans in this series utilized standardized B.C. lumber products. The square layout was considered optimum for small rural dwellings, the heat source being placed as close to the centre as possible.

B.C. Dept. of Lands. Forest Service. *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916), p. 35

> British Columbia ... desires to give the citizens of Alberta, Saskatchewan, and Manitoba full information concerning her forest products, asking them to bear in mind that these products are grown and manufactured in Canada and that trade between the Provinces of the Canadian West is the surest foundation for our common prosperity.[11]

Four other bulletins specifically dealt with the uses of B.C. lumber products. The series was distributed free by the B.C. Forest Service, by various provincial government agencies in Saskatchewan, and by local lumber dealers throughout the Prairies — by 1915 the value of free plan brochures was recognized by the building trade, which actively promoted their distribution and use. The bulletins were also distributed throughout Saskatchewan on the annual "Better Farming Trains" sponsored by the University of Saskatchewan from 1915 onwards.[12]

Both the Manitoba and Alberta governments also developed free brochure series, although neither rivalled the Saskatchewan series in scale or distribution. Of particular interest was a 1917 bulletin, entitled *Better Farm Homes*, published by the Manitoba Department of Agriculture and Immigration.[13] It contained plans and descriptions of five prize-winning entries in a 1916 "Better Farm Homes Competition" open to Manitoba farm women and sponsored by the Manitoba Agricultural College in cooperation with the province's department of agriculture:

> It was hoped by this method to learn what type of house the housewife on the farm actually needed for our Western Canadian conditions; for who better can tell what is necessary in the farm home than the women whose life work is in these houses?[14]

The average size of the winning houses was 28 feet by 34 feet or 30 feet by 32 feet, and the average kitchen was 11½ feet by 15 feet. Detailed enlargements of the kitchens showed the arrangement and location of the various appliances and furnishings (Fig. 51). The plans were all for one-and-one-half- or two-storey dwellings, including one bungalow and one house with a cross-gambrel roof. Three plans were for relatively compact, inexpensive houses, although the judges noted that very few plans were submitted for houses smaller than 28 feet by 30 feet, and the remaining two were for larger and more costly homes (Figs. 52, 53).

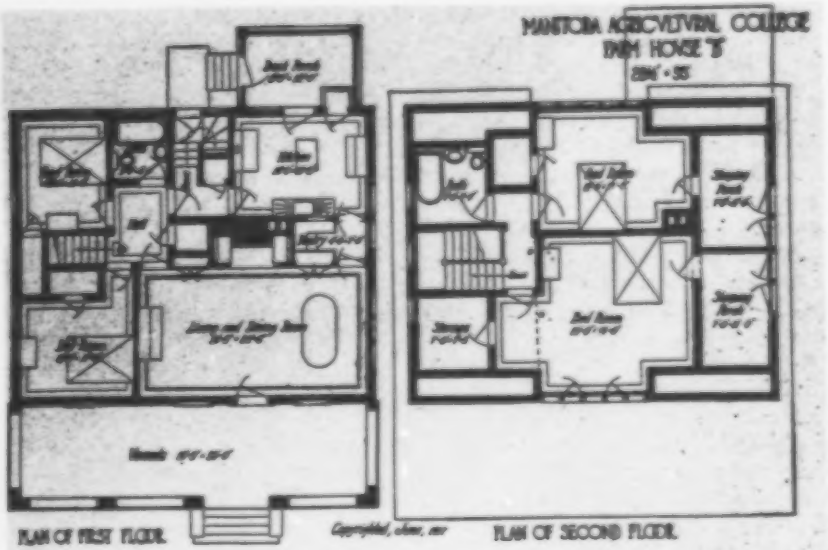
The plans produced by the Manitoba and Saskatchewan agricultural colleges were not distributed only in pamphlets. They were reprinted, frequently with glowing endorsements, in various periodicals. Thus the various Manitoba farmhouse plans appeared in *The Farmer's Advocate*, *The Agricultural Gazette of Canada*, and *Western Lumberman*,[15] and designs from the Saskatchewan series received even more extensive coverage in these publications. Prairie farmers would have had a hard time avoiding them.

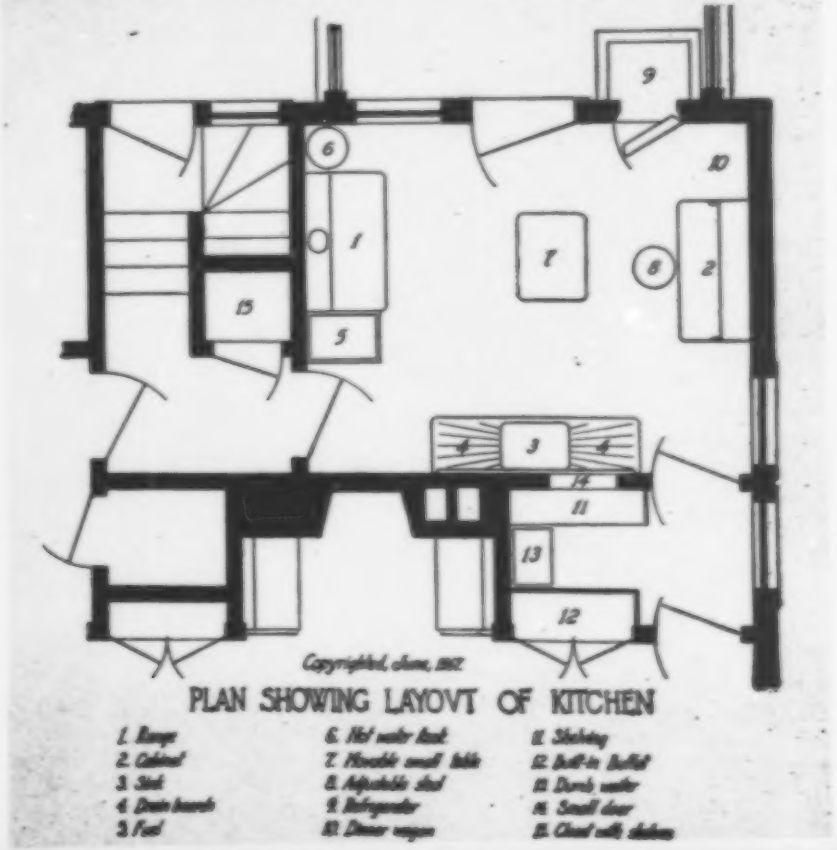
Plan Books and "Made-to-Order" Plans

In time the lumber industry converted farmers' need for better building designs into an effective marketing tool, but initial retailers' involvement was confined to a few enterprising firms that offered design services. One of the first was Edmonton's Cushing Brothers Limited, which offered a $50 prize for the best farmhouse design submitted at the Edmonton exhibition in 1910. The rules stipulated that the house was to meet the requirements of a quarter-section mixed farm occupied by a married couple with three or four children and was to be built in successive stages, the first section costing no more than $500 and the final building no more than $1500 "exclusive of plumbing, fittings, etc." (Fig. 54).

By 1915 the idea of free building plans had been seized upon for commercial purposes by the lumber industry, and within a few years farm building design had become a major preoccupation. The WRLA entered the plan book business in the summer of 1915 (Fig. 55), borrowing a strategy already adopted by similar associations in the U.S. A member of the staff of the Manitoba Agricultural College was hired to prepare designs, with the support of a drafting office and an advisory committee of dealers charged with inspecting the plans to ensure "their being practical."[16] Practicality in this case meant conformity to stock materials carried by retail yards. The enterprise was couched in terms of a crusade, both against mail-order competition and to aid farmers:

> Retail lumber dealers of the three prairie provinces are now being equipped with the sinews of war to adequately combat and overcome the enemies of the legitimate lumber trade.... The total cost of the buildings will range from $500 to $5,000. The greatest concentration will be paid to the development of a house which can be built for about $1,500.
>
> Emphasis is laid on the distribution of these books to the farmers, for is it not a fact that the unfavorable conditions





51 Floor plan and kitchen layout for plan B in the Manitoba Agricultural College's *Better Farm Homes* brochure. The attention given to the kitchen reflected growing concern for the conditions farm women faced.

Leslie John Smith, *Better Farm Homes (A Bulletin of House Plans)* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1917), p. 7

52 House design E in the Manitoba Agricultural College brochure was a variation of the "square house" that was so popular on the Prairies from about 1908 onwards.

Leslie John Smith, *Better Farm Homes (A Bulletin of House Plans)* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1917), p. 17

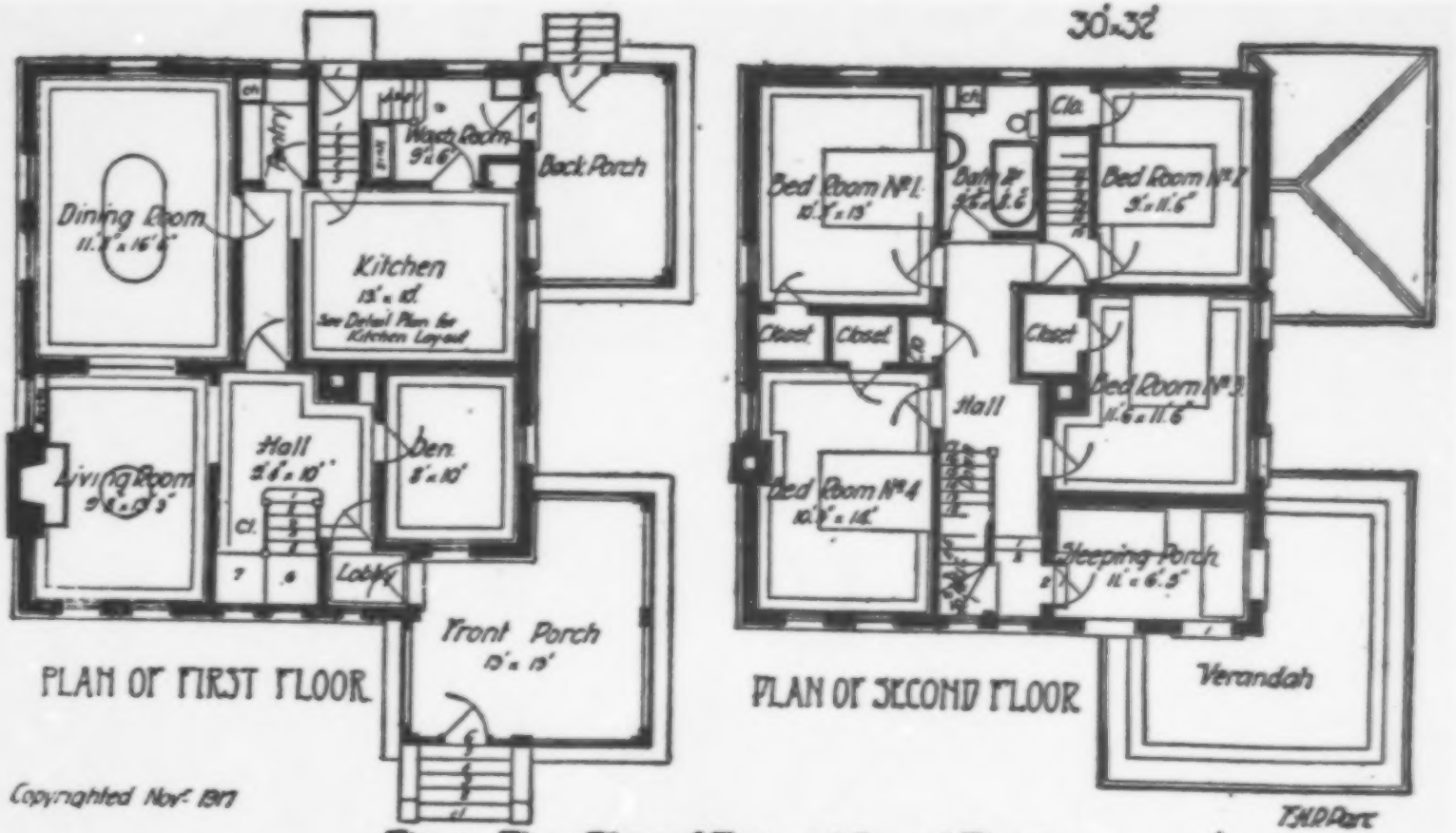


Fig. 3—Floor Plans of First and Second Floors.

53 Plan of house design E.

Leslie John Smith, *Better Farm Homes (A Bulletin of House Plans)* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1917), p. 16

54 This plan for a farmhouse that could be built in two stages for no more than $1500 won first prize at the 1909 Edmonton exhibition.

"Design of Farm Home and Plan of Farm Buildings," *The Nor'-West Farmer*, 21 Feb. 1910, p. 203; by permission of *Country Guide* magazine

55 The WRLA Building Department, shown here in 1918, was established in 1915 to prepare plan books, full-size building plans, and made-to-order plans.
"WRLA Annual Meeting," *Western Lumberman*, Vol. 15, No. 2 (Feb. 1918), p. 23

56 "Talk houses and barns, the people know little about lumber and could care less." After 1914, lumber retailers were urged to display building plans in their offices to promote sales.
Glenbow Archives, Calgary, NA-1801-14

> under which many farmers' wives have been forced to exist, are responsible for a great deal of the spirit of dissatisfaction and hope abandoned?[7]

The plan book now became a major tool for the local lumber merchant. His office walls were lined with illustrations of farm buildings and his counters with stacks of plan books for his clients to browse through (Fig. 56). Unlike the more detailed brochures available from government agencies and agricultural colleges, the WRLA plan books contained only sketched illustrations and floorplans that were insufficiently detailed to build from. They were simply intended to motivate the farmer to ask for additional information from his local lumber dealer, who could furnish detailed specifications and cost estimates; large-scale working plans could also be obtained at a nominal cost.

The first edition of the WRLA plan book was sent out to retailers in August 1915, and by the end of the year 25 000 copies had reached prospective customers. During this period dealers were being advised on the effective use of plan books as sales tools through an intensive advertising campaign in the *Western Lumberman*:

> Talk houses and barns, the people know little about lumber and could care less.... The people to-day are interested in houses and barns, and with these books you can talk houses

> and barns to the people, talk lumber as a secondary feature of the argument.[18]

Like the B.C. Forest Service and Saskatchewan Agricultural College brochures, WRLA books catered to the market for houses, barns, implement sheds, and various outbuildings. The first edition contained plans for 34 farmhouses, each averaging $3000 in cost, which suggests that they were too expensive for most Prairie farmers. However, the WRLA did advertise a plan for a compact house costing less than $1500. This was a two-storey structure 22 feet by 23 feet (Fig. 57). The ground floor contained a large living room with a "dining recess" and a small kitchen, off which was a porch described as a "summer dining room." A side vestibule containing a washbasin led directly into the living room. In later versions the living room was cut in half to provide a ground-floor bedroom in response to the widespread advocation of this feature. The upper floor contained three small bedrooms reached by an enclosed stairwell.

Subsequent editions of the WRLA plan book contained many designs for compact one-and-one-half-storey farmhouses with similar layouts. Typically they featured several (usually three) very small bedrooms and a living-kitchen area, but had no amenities such as bathrooms, porches, or sizeable pantries. Increasing emphasis on small, inexpensive houses with minimal conveniences undoubtedly reflected the requests retailers were receiving.

In addition to regularly upgrading the selection of designs, the WRLA also inaugurated a "made-to-order" service, obviously patterned after American models. Dealers could relay requests for specific building plans that would then be drawn up for nominal fees.

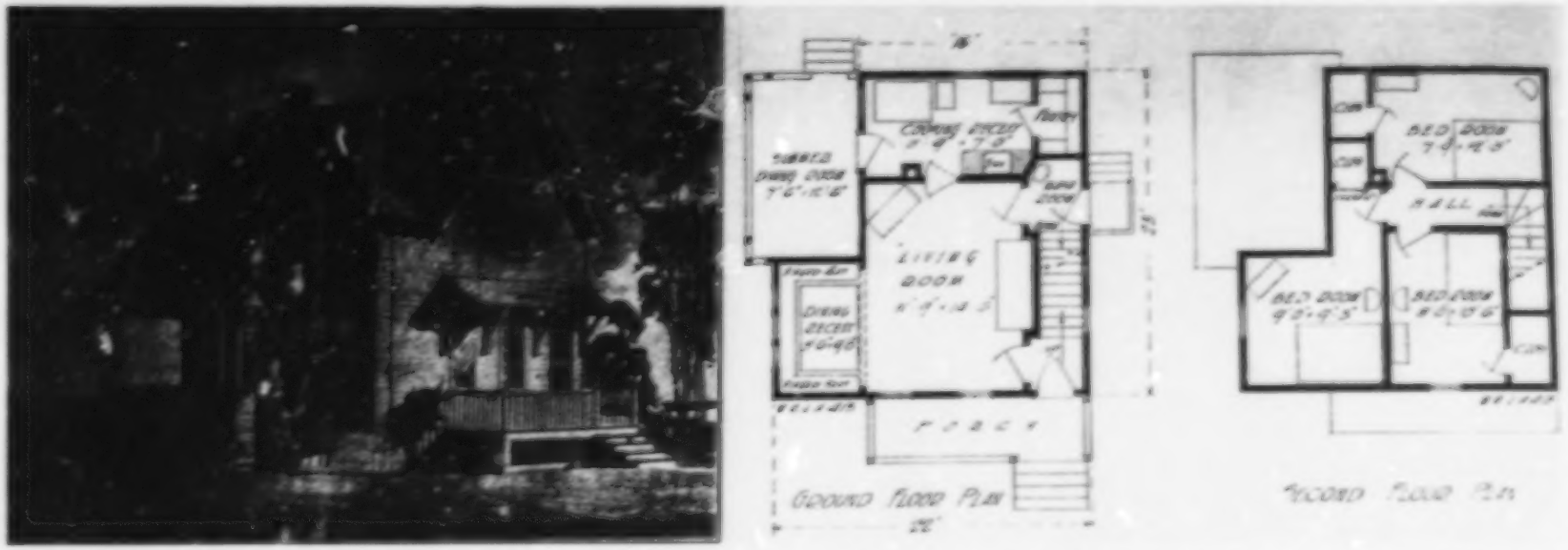
The WRLA'S annual reports indicate that the plan book and architectural service were regarded as successes both in generating sales for WRLA members and in producing revenue for the association. Thirty-five thousand plan books were distributed in 1916 and orders were received for 160 of the house plans and 239 of the barn and outbuilding plans; the number of farmers who built directly from the books is, of course, impossible to determine. In addition, made-to-order plans were prepared for 68 houses, 42 barns, and 35 other types of buildings (including schools and churches) during the same year. Sales increased in 1917 to 374 standard plans and 428 special orders, and by 1919, gross plan sales totalled 1279. Pleased with its success, in 1920 the association published 100 000 copies of its revised plan book, 80 000 of which were purchased by member dealers before printing was completed.[19] In 1917 the WRLA introduced a correspondence "retail lumbermen's training course" that instructed members and non-members on farm building design, reading plans, drafting, and construction theory in addition to sales techniques. The course was intended to augment the plan book campaign by upgrading member's skills and encouraging the growth of service departments among small dealers; it was also seen as a way to reduce the influence of local contractors:

> this movement ... is a conscious effort of the progressive dealers to get away from the dependence on contractors for building plans and making out bills for them and otherwise relying on them for their influence in selling the same. The dealer will become the principal source of building information in an agricultural community, and [will] become builder for people and hogs as well.[20]

By 1916 most farm journals had established their own building departments and featured columns on building design in each issue, encouraging their readers to send in requests for free assistance.[21] The *Western Lumberman* introduced a similar service in 1917, supplementing the heavy volume of building information it was already carrying from the WRLA, B.C. Forest Service, and other agencies. In its case its clientele were lumber retailers who could obtain working drawings and professional advice on building matters for nominal fees. While the WRLA provided made-to-order service to member dealers, a number of large lumber firms established their own architectural departments and offered both stock plans and special services to prospective customers (Fig. 58).[22]

The plan book and service department phenomena of 1915–20 marked an increasingly aggressive phase in retail marketing. The shift in focus of sales from lumber to buildings coincided with the drop in lumber sales between 1913 and 1915, and assumed increasing momentum with the availability of easy credit over the next five years. Prairie farmers became the targets of intensive advertising campaigns as the lumber industry tried to convince them that buildings should be their first priority when they began to spend more money.

Houses continued to be difficult items to sell, simply because western farmers tended to regard new dwellings as luxuries that could be put off until some future time. The prevailing starkness of Prairie housing was in



57 The WRLA's plan for a $1500 farmhouse. "The interior arrangements are very pleasing, yet the space is used to the very best of advantage."

"Plan Books — The 1915 Way to Sell Lumber," *Western Lumberman*, Vol. 12, No. 8 (Aug. 1915), p. 18

part the product of necessity and in part the reflection of priorities in a newly settled region.

> Undoubtedly part of this general comfortlessness, evident even in relatively prosperous communities, must be attributed to lack of interest rather than a lack of funds, indicating that the farm house is regarded chiefly as a convenient centre for such essential rites as eating, sleeping and separating the milk.[23]

One factor contributing to the widespread reluctance to upgrade accommodation was that house construction was primarily a fair-weather activity that competed for a farmer's time with the pressing summer demands of farming. Another was farmers' inclinations to use available funds to buy equipment or additional land. As a result, many farmers contented themselves with hasty improvements and improvised additions to their original shacks, seeing these as both less costly and less time-consuming than undertaking new construction. In many cases this incremental approach resulted in dwellings in perpetual need of repair and modification.[24]

Although immediate needs dictated the construction of other buildings, like granaries and implement sheds, Prairie farmers often opted for makeshift structures there as well. Observers puzzled over the annual rush to erect temporary buildings each fall: "Western Canada as a farming community is altogether too much given to the putting of expensive building materials into temporary buildings; stables, granaries, sheds, even houses," scolded *The Farmer's Advocate* in September 1914.[25]

One structure that dealers zealously promoted was the silo, which American lumbermen had been successfully marketing for several years in the Midwestern states, but received a less enthusiastic response in

"A MANSION IN THE SKIES"
May be your hope for the future
but—
A COTTAGE ON EARTH
should be your realization for the PRESENT
See us for FREE Building Plans and Cost Estimates
BUILD A HOME OF YOUR OWN
IMPERIAL LUMBER YARDS LIMITED

58 Retail lumber firms began establishing their own plan departments (often using plans supplied by the WRLA) after 1915. Ads like this offered free building plans to promote sales.
The Saskatchewan Farmer and Grain Growers' Gazette, Vol. 12, No. 6 (March 1922), p. 8

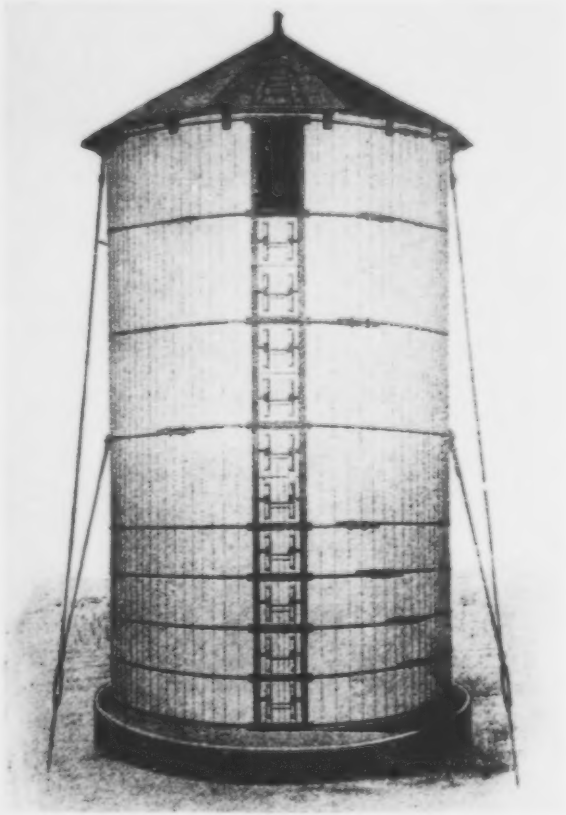
western Canada.[26] Nevertheless, most plan books contained at least one design for a wooden silo, the most common and widely advocated being the stave type, usually built from 20-foot pine or spruce staves braced at 3-foot intervals by metal hoops or cables and covered with a conical roof (Fig. 59). The various silos introduced to the Prairies from 1910 onwards proved to have structural problems. Stave-type silos tended to warp and split under Prairie temperature fluctuations and frost heaves, while their concrete rivals tended to crack and corrode.[27]

Dealers also campaigned to sell new barns (Fig. 60). Plans for a wide variety of specialized types in numerous shapes and sizes were available, the common characteristic after 1910 being the universal use of light balloon or platform frame construction that utilized standard-size milled lumber. Gable roofs were commonly employed for stables and small multiple-purpose barns, while gambrel roofs were widely favoured for larger barns since this roof offered greater loft capacity (Fig. 61). After 1914 most plan publications carried a selection of gothic-arch-roofed barns as well. The arch roof offered still greater loft storage capacity than the gambrel roof as well as increased structural rigidity,[28] but remained less popular on the Prairies before 1920, probably due to greater construction costs (Fig. 62).

A fundamental obstacle to barn and silo construction lay in the high cost of these structures. In 1916, materials for a basic barn cost at least $600 — the price escalating rapidly if carpenters were hired and features such as an efficient ventilation system were added — and stave silos cost at least $150 in 1916. These costs made barns and silos major financial undertakings that were beyond most farmers' means and were a deterrent against a major swing to mixed farming.[29]

Silo and barn building campaigns met with a degree of success in some parts of the Prairies, usually areas where mixed farming was economically viable, although the long-term benefits dealers had forecast to their farmer-clients were not necessarily forthcoming. A 1936 study of Prairie agriculture noted a substantial number of expensive barns with capacities far exceeding existing needs, a situation attributed to accelerating mechanization during the 1920s and the corresponding decline in the number of horses required on most farms.[30]

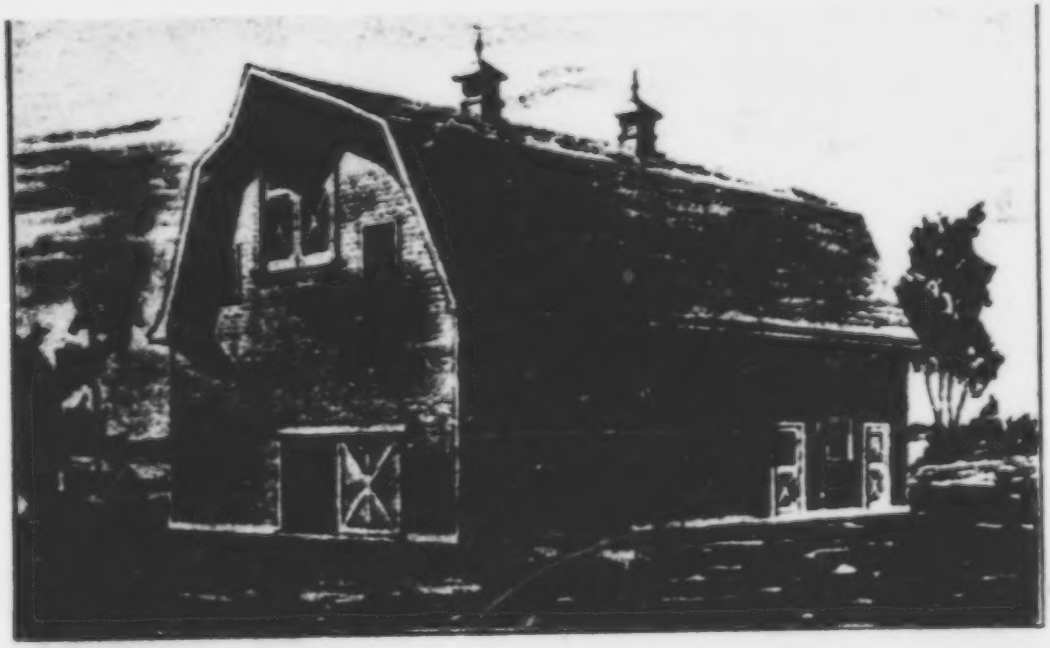
In contrast, the demand for buildings directly associated with grain growing increased. These included small, multi-purpose barns or stables, implement sheds, and above all, granaries. Granaries were essential for

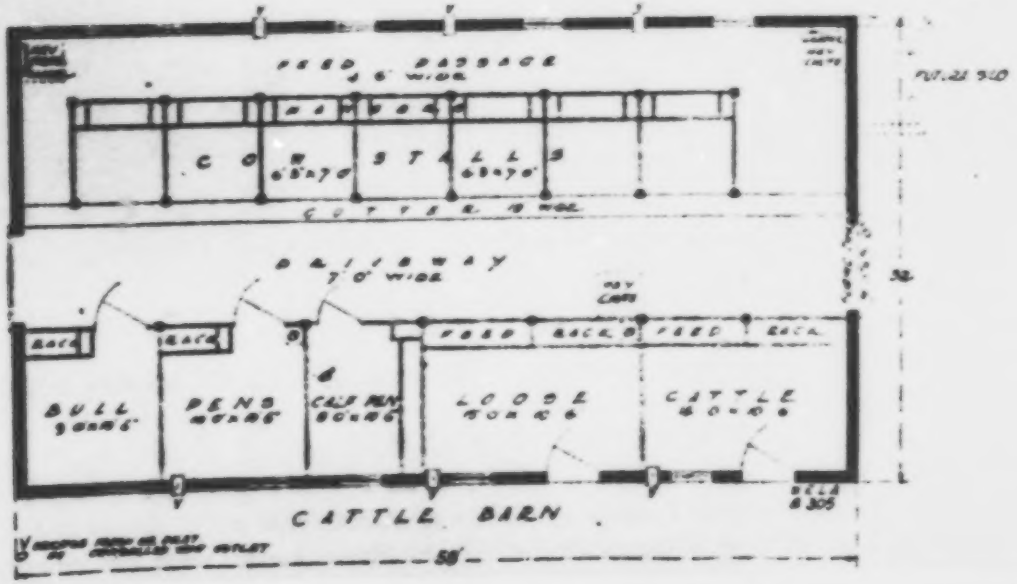


59 WRLA design for a stave-type silo.
"Why the Silo Has Come to Stay," *Western Lumberman*, Vol. 14, No. 10 (Oct. 1917), p. 43

60 Lumber retailers were instructed in the latest hard-sell marketing techniques.
"Getting Results with the Telephone," *Western Lumberman*, Vol. 14, No. 10 (Oct. 1917), p. 34

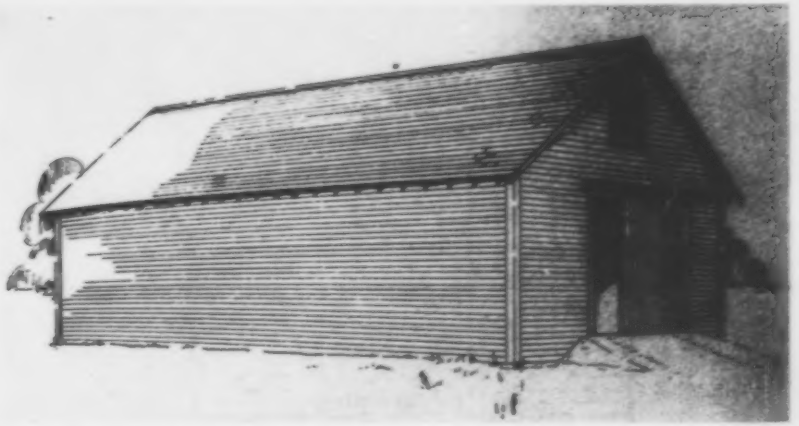
storing wheat both during and after the harvest. They came in two sizes: small, portable granaries, basically skid-mounted wooden bins that could be towed to convenient locations following the threshers; and larger, permanent granaries and elevators suitable for storing a large proportion of the annual harvest. Granaries had to be heavily built in order to withstand the lateral pressure of the wheat; they also had to be watertight to prevent spoilage. Although a number of circular metal granaries were marketed before 1920, most farmers opted for wooden structures, likely due to their lower cost, and consequently granary plans were standard features of plan brochures and catalogues of the period. While portable granaries might vary somewhat in size and detail, the basic functional and structural requirements dictated a more-or-less standard design. The larger, permanent ones came in a variety of configurations ranging from simple gable-ended structures with sliding doors that permitted wagons to enter (Fig. 63) to monitor-roofed buildings (*see* Fig. 209) that accommodated mechanized conveyor belts to empty the wagons. Although portable and permanent granaries accounted for much of the building activity on Prairie farms between 1915 and 1920, they were not the only solution to





61 WRLA cattle barn design B-305.
WRLA, *Plan Book of Houses and Farm Buildings for Western Canada* (Winnipeg: 1919), p. 53

62 The "Manitoba Barn" offered by the Winnipeg-based North American Lumber and Supply Company in 1919. "A barn that would make any farmer proud," it had "accommodation for twenty cows, two calves, two loose stock pens, sixteen horses, three box stalls, as well as a harness room and stairway."
"A Handsome Barn — The Manitoba," *Western Lumberman*, Vol. 16, No. 6 (June 1919), p. 27



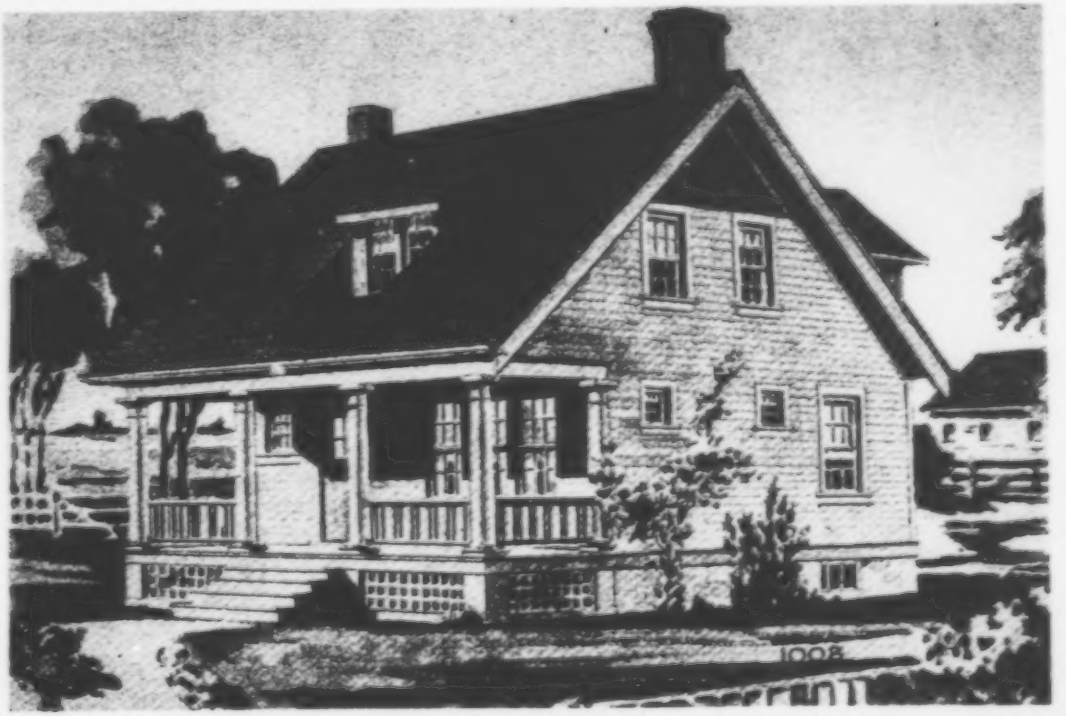
63 "Permanent Granary No. 2."
B.C. Dept. of Lands. Forest Service, *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915), p. 31

grain storage problems: countless former homesteaders' shacks, barns, and sheds were routinely recycled to serve this purpose too.

The free plan did become firmly established as an enduring marketing tool for the retail lumber trade in Western Canada. While the WRLA and its members had borrowed this strategy from American plan book publishers and trade associations, their promotional campaigns were in themselves regarded as innovative within the retail lumber trade:

> the prospective builder on the prairies can know exactly what his "home" is going to look like and its ultimate cost before starting it, and the organization of this service, entirely free by the retail lumbermen of the West has put them in the front ranks of the better merchandizers of the continent. Latterly, the Illinois, Mississippi Valley and other U.S. lumbermen, as well as individual supply houses in Canada are following the same service. Incidentally, the Ontario lumbermen are just now contemplating the same cooperative furnishing of free plans and service to minimize the cost of furnishing it.[31]

One consequence of this plan-oriented marketing was the increasing focus it gave to western farmers' building needs. In theory the designs published in mail-order catalogues and plan books gradually evolved to reflect prevailing needs, tastes, and budgets, but in practice, although definitions of suitable design elements for Prairie farmhouses were prompted in part by marketplace demands, they were also influenced by



64 The New England Prairie Home offered by the WRLA in 1917. "Its color scheme is: roof, moss green shingle stain; body, Colonial yellow; trim, light lead; verandah posts, Colonial yellow." While internal layout became increasingly geared to the needs of farm life, exterior design frequently sought to evoke the images of current urban fashions.
"Three Big Questions Before Retail Trade Today," *Western Lumberman*, Vol. 14, No. 11 (Nov. 1917), p. 21

the growing awareness of the persistently low standards of rural accommodation.[32]

> When you visit some of the dwellings of the well-to-do farmers, and see the sordid primitive conditions of living, you will be enlightened as to the reason why so many farm wives want to move into town.[33]

Proper house design came to be seen as a key to "wholesome" living on the farm, and plans were presented in terms of improving the rural standard of living. By 1920 the prerequisite features of a satisfactory farmhouse started with three distinct areas for living, working, and sleeping. "Spaciousness must be expressed in the living area, compactness in the working area, and privacy in the sleeping areas," pronounced the *Western Lumberman*,[34] which also recommended a southern exposure for principal rooms, an office with ready access to the driveway and barns, a ground-floor bedroom for use in case of illness or accident, separation of employees' from family's sleeping areas, and a washroom, placed next to the rear entrance, that also served for laundry, general storage, fuel supply, etc. Screened verandahs were also strongly advised.

While most of these interior features were clearly linked to farm life, exterior designs usually reflected current urban styles rather than attempts to develop distinctive regional styles or even to develop styles in harmony with the Prairie landscape (Fig. 64).

Mass Marketing's Impact on Prairie Farm Buildings

The effectiveness of mail-order catalogues and plan publications in defining and disseminating building designs for the Prairie agricultural market by 1920 was a far cry from the circumstances in preceding decades. In less than ten years published designs and mail-order building systems became effective vehicles for circulating design ideas throughout the region. The circulation of plans enabled their publishers to identify the tastes and needs of the farm marketplace with increasing accuracy, despite the apparent miscalculation in the barn and silo campaigns associated with mixed-farming promotion (regardless of their long-term utility or suitability, silos and large dairy barns did generate increased lumber sales in certain areas). The success of these marketing techniques was particularly evident in the case of farm housing, for which clear design criteria regarding suitable interior layouts were formulated between 1912 and 1920. This was in sharp contrast to the previous decade when rural inhabitants remained largely reliant on transplanted designs, vernacular building traditions, or local improvisation when it came to house construction.

While various attempts were made to develop mass-produced systems to meet the demand for farm housing before 1910, these achieved limited success at best due to the absence of effective marketing. In the case of the CPR's ready-made farm program, a set of efficient and inexpensive house designs were developed, but their distribution was ultimately confined to specific areas where the railway was promoting land sales.

An intriguing aspect of the shift to mass-marketing techniques for promoting building designs and systems on the Prairies was the fact that it occurred at a crucial point in the region's history. The advent of mail-order sales, magazine advertising, free brochures, plan books, and the various other methods used to generate sales of buildings and building materials coincided with the cresting of the settlement boom in western Canada and the subsequent stabilization and consolidation phase during which many rural inhabitants were induced to build permanent homes and farm buildings by the sudden availability of easy bank credit. The pervasiveness of these marketing methods is vividly demonstrated by the fact that no major vernacular building traditions flourished much beyond the first generation of settlement on the Prairies, despite the presence of various immigrant groups that had brought strong building traditions with them. The substantial dwellings of eastern European settlers quickly gave way to new houses of wood-frame construction, no doubt due in part to the allure of plan books and catalogues as well as to the pervasive dominance of milled lumber as the standard building material of the region. To live in a house of milled lumber construction came to bear connotations of success, both as a farmer and as a Canadian — connotations that the lumber industry went to considerable lengths to promote, particularly during and after the First World War.[1] The widespread acceptance of milled lumber as the standard building material in the region before 1920 shaped the Prairies' rural architectural landscape and provided the bulk of its farm building stock for the next four decades.

This rapid transition from local or regional building traditions or reliance on local contractors for building designs to broader, commercially imposed designs was not peculiar to the Prairies, of course, but the effects of the shift were perhaps more apparent here than elsewhere, partly due to the new and rapidly settled character of the region and partly to its reliance on external sources of building materials to meet its needs.

Part III
A Survey of Pre-1920 Houses, Barns, and Outbuildings

Introduction

The early farm buildings of Manitoba, Saskatchewan, and Alberta are a remarkable yet fragile cultural resource. Nowhere else in Canada can one find so many structures dating from a region's settlement phase. Nowhere else have pioneers' living and working facilities lingered as a major proportion of the building stock for so long. Perhaps their comparative abundance, at least until recent years, explains the indifference they seem to have inspired among so many rural inhabitants. Detailed descriptions of old frame farmhouses and barns, and recollections of their construction, are curiously infrequent in the scores of local histories that have been compiled during the past two decades. At first glance it seems odd that the buildings that provided shelter for successive generations of farm families over many decades seem less favoured as objects of historical importance than second-hand or hazy recollections of long-gone soddies or log cabins. Perhaps this can be explained by the fact that for many, the lengthy endurance of old frame buildings was a reflection of economic misfortune. In all too many cases old buildings remained in use despite their deficiencies simply because their owners could not afford to replace them. In other cases old buildings have lingered as abandoned derelicts, silent reminders of the relentless decline of the family farm and of the region's rural population. Such circumstances make a reluctance to celebrate their survival understandable, but nevertheless regrettable. The early dwellings, barns, and outbuildings scattered across this vast region have an importance that extends far beyond the individual stories they may tell. Collectively they offer us an opportunity to comprehend the dimensions of the historical processes by which over a quarter of a million families converged on the Prairies to establish new lives and a distinctive agricultural society within a time span of three or four decades.

What follows is a sampling of common farm buildings constructed on the Prairies before 1920. Representative designs taken from plan books, brochures, catalogues, and periodicals known to have circulated in the region have been combined with photographs of built examples, some dating from the early settlement period, others from the 1970s and 80s. The houses have been grouped according to roof shape and general plan, except in the cases of preliminary housing forms, which constitute a distinct group in their own right, and cottages and bungalows, which are grouped under the terms commonly applied to them in contemporary publications. The selection of built examples was obtained from various archives, provincial heritage agencies, and the Canadian Inventory of Historic Building. While CIHB records are admittedly far from comprehensive in terms of geographic coverage, the 5200-odd farmhouses and 958 barns listed represent the largest architectural survey conducted to date on the Prairies.

Most CIHB recording on the Prairies took place between 1972 and 1976, and many of the buildings illustrated here have undoubtedly disappeared as a result of the general decline in the number of family farms and of the continuing process of replacement and upgrading that occurs on still-operational farms. In this respect the CIHB survey's value as an archival record of fast-disappearing buildings is increasing year by year.

Grouping the Prairie farmhouses in CIHB records according to number of storeys and basic roof shape offers some indication of once-prevalent house types. One-and-one-half-storey gable-roofed examples were by far the most common, accounting for over 2100 of the total. The second most common type was one-storey gable-roofed houses, which number 1001, followed by one-, one-and-one-half-, and two-storey hip-roofed examples in that order (*see* Appendix B, Table 1). Unfortunately, these figures can only offer clues, for information based on surviving pre-1920 farmhouses undoubtedly distorts what actually existed before the twenties. The low number of one-storey shed-roofed examples likely reflects the low survival rate of buildings that were frequently regarded as temporary shelters or that eventually became wings of larger structures.

While the number of barns in the CIHB Prairie survey is too low to serve as an accurate statistical base, the high number of gable-roofed

examples is likely a reasonably accurate reflection of the prevailing need for small structures that were less costly to build than the gambrel- and arch-roofed varieties.

Although published plans and built structures have been grouped together here, the constructed examples were not necessarily taken directly from the specific plans shown. Firmly establishing the source of design for individual structures would entail research that is beyond the scope of this study although in some instances, in particular the examples of CPR ready-made-farm buildings, B.C. Mills prefabs, and Eaton's mail-order houses, unmistakable design features do permit positive identification.

Finally, the reader is reminded that this survey is intended to identify building types that reveal the influence of mass-produced plans and standardized building materials and technology on the Prairies before 1920. Distinctive structures that were very much the products of their builders' own skill and ingenuity did — and may still — exist, but were rarities in a land where high lumber costs and limited funds dictated utilitarian uniformity in most farm buildings.

65 A bachelor's shack built at Vonda, Saskatchewan, in 1903.

Preliminary Dwellings

Bachelors' Shacks

In its most rudimentary form the preliminary frame house on the Prairies was a temporary shack built from low-grade lumber, tar paper, and whatever else was available. Most were intended to provide shelter for their occupants (frequently single men — hence the term "bachelors' shacks") during the period of compulsory occupancy required to secure title to free land. Pre-emption rules entailed at least six months' occupancy in each of three consecutive years, construction of a residence worth at least $300, and breaking a minimum of 30 acres for farming. Design and construction of such shacks were left largely to the occupants' resources although farm journals responded to requests for advice with increasing frequency after the turn of the century. Arch-roofed versions, known as "car roofs," were less versatile than shed- or gable-roofed shacks, which could find future use as wings of larger houses.

Car-roofed cabin on the homestead of Archie Roberge, Plunkett, Saskatchewan, 1913.
Saskatchewan Archives Board, Photograph No. R-A2306

67 A car-roofed settler's shack near Swift Current, Saskatchewan, no date.
CHB, 1972

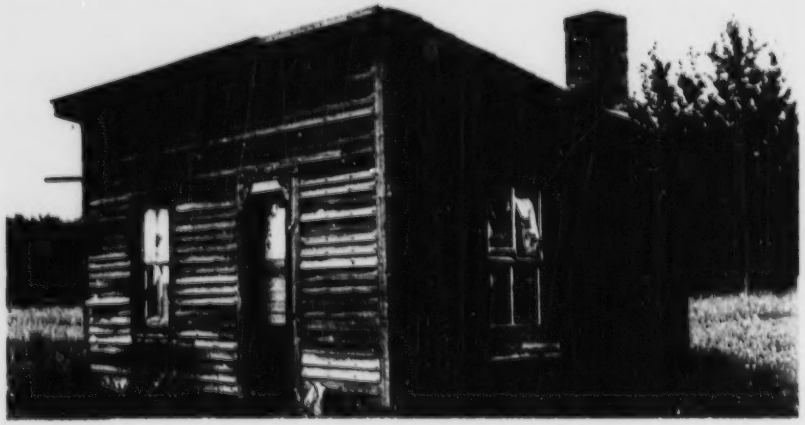
68 Car-roofed shacks likely derived their name from railway boxcars and colonization cars such as this one, near Retlaw, Alberta, which was converted into a temporary dwelling
CHB, 1974

Shed-Roofed Shacks

Settlers frequently used shed roofs on one-storey dwellings since such structures were easy to build, used a minimal amount of lumber, and later could be readily converted into lean-to wings of larger houses (*see* Figs. 77–79). In many instances the original shack became a permanent dwelling and was enlarged by further shed-roofed additions. Early residences of this type varied from single-room bachelors' shacks to larger structures with internal partitions. They also varied in durability, depending on the skills and intentions of their builders and the quality of materials used. Light wood framing using 2-x-4-inch or 2-x-6-inch studs was commonly employed for walls. At least two layers of exterior sheathing separated by a layer of tar paper were recommended for outer walls; inner walls were usually finished with tongue-and-groove siding or lathing and wallpaper.

69 Shed-roofed shack at Coothill, Saskatchewan.
CHB, 1972

70 Shed-roofed shack at Gorlitz, Saskatchewan.
CHB, 1972



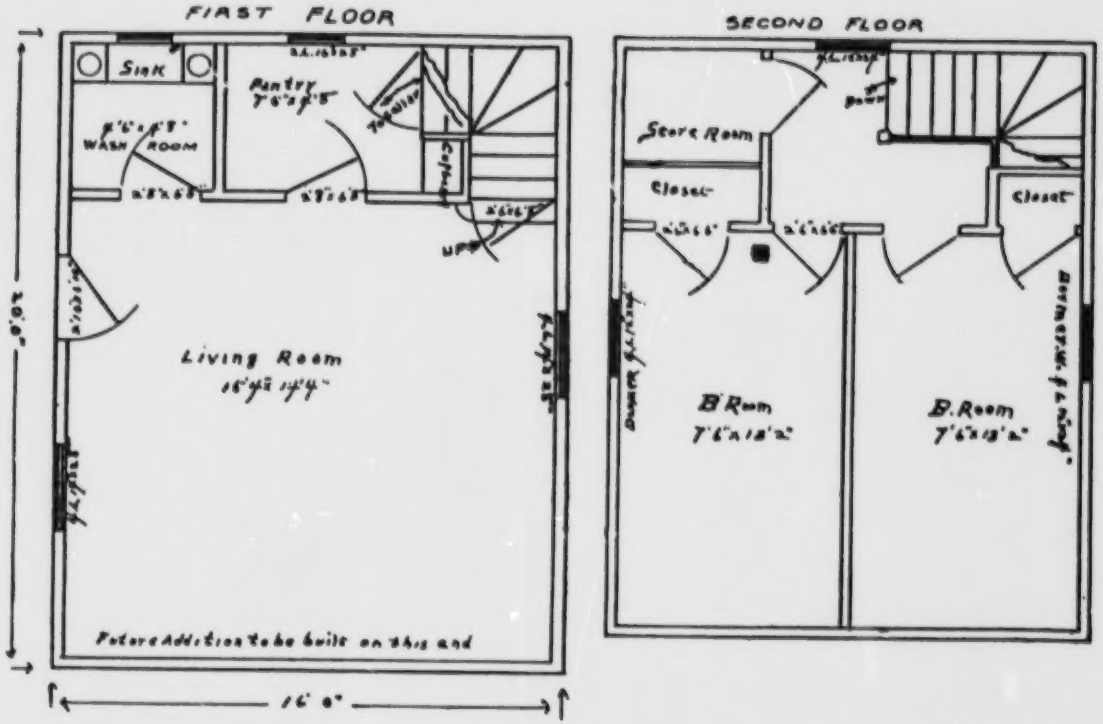
71 Shed-roofed shack, Rivière Qui Barre, Alberta.
CIHB, 1974

72 J.A. Spitzmesser's dwelling, built near Airdrie, Alberta, in 1907, was typical of countless one-and-one-half-storey houses that appeared across the Prairies during the settlement boom.
Glenbow Archives, Calgary, NA-598-10

Gable-Roofed Settlers' Houses

Many settlers chose simple one-and-one-half-storey gable-roofed houses as their first permanent residences. The popularity of this basic design, invariably consisting of sleeping quarters on the upper floor with kitchen and living facilities below, was reflected in countless owner-built examples and in a number of commercial versions as well.

After 1900, farm journals occasionally published floor plans and construction advice for settlers who intended to build one-and-one-half-storey houses like these. Overall dimensions usually did not exceed 18 x 24 feet in order to keep construction costs down. This small size and rectangular plan dictated high side walls — at least 14 feet — and a medium-pitched roof rising to 22 feet at the ridge in order to obtain standing headroom on the upper floor. The upper floor was usually divided into two small bedrooms, but partitions were kept to a minimum on the ground floor, providing a large eating-living area that could eventually be converted into the kitchen of a larger T- or L-shaped house. Chimneys were placed on gable-ends in most early examples. Exterior wall coverings varied from rough common lumber or shiplap to clapboard and drop-siding.



73 Floor plans for a 16-by-20-foot settler's house published in *The Nor'-West Farmer* in May 1903. Its designer advised that the partition dividing the upper floor into two bedrooms could be removed when the building became the wing of a larger dwelling.

"A Very Useful House for Beginners," *The Nor'-West Farmer*, 20 May 1903, p. 512; by permission of *Country Guide* magazine

74

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74 Gable-roofed settler's house, Basswood, Manitoba. The metal stove pipe would typically have been replaced by a brick chimney if the house was intended to be permanently occupied.
CIHB, 1974

75 A gable-roofed settler's house with a centre-hall plan, Harmattan, Alberta. In this case the occupants filled the spaces between the studs with sand in an attempt to reduce heat loss.
CIHB, 1974

76 Gable-roofed dwelling, Fort Garry, Manitoba.
CIHB, 1976

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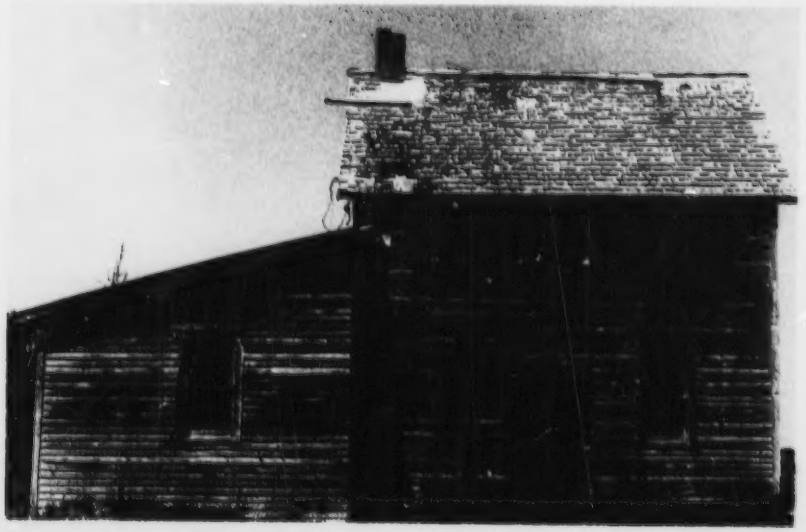

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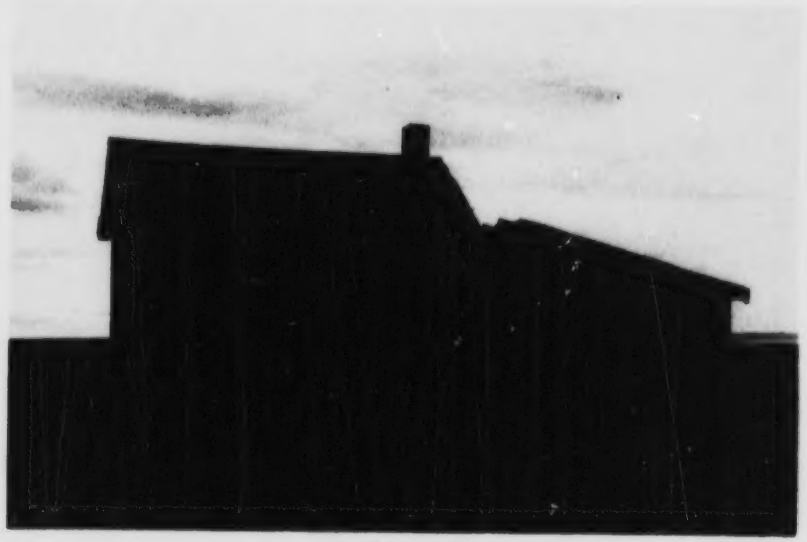


77 Gable-roofed house with a shed-roofed summer kitchen at the rear. Success, Saskatchewan.
CIHB, 1972

78 Combinations of one-and-one-half-storey gable-roofed houses and earlier shed-roofed shacks were commonplace on the Prairies. This one is located at Newdale, Manitoba.
CIHB, 1974

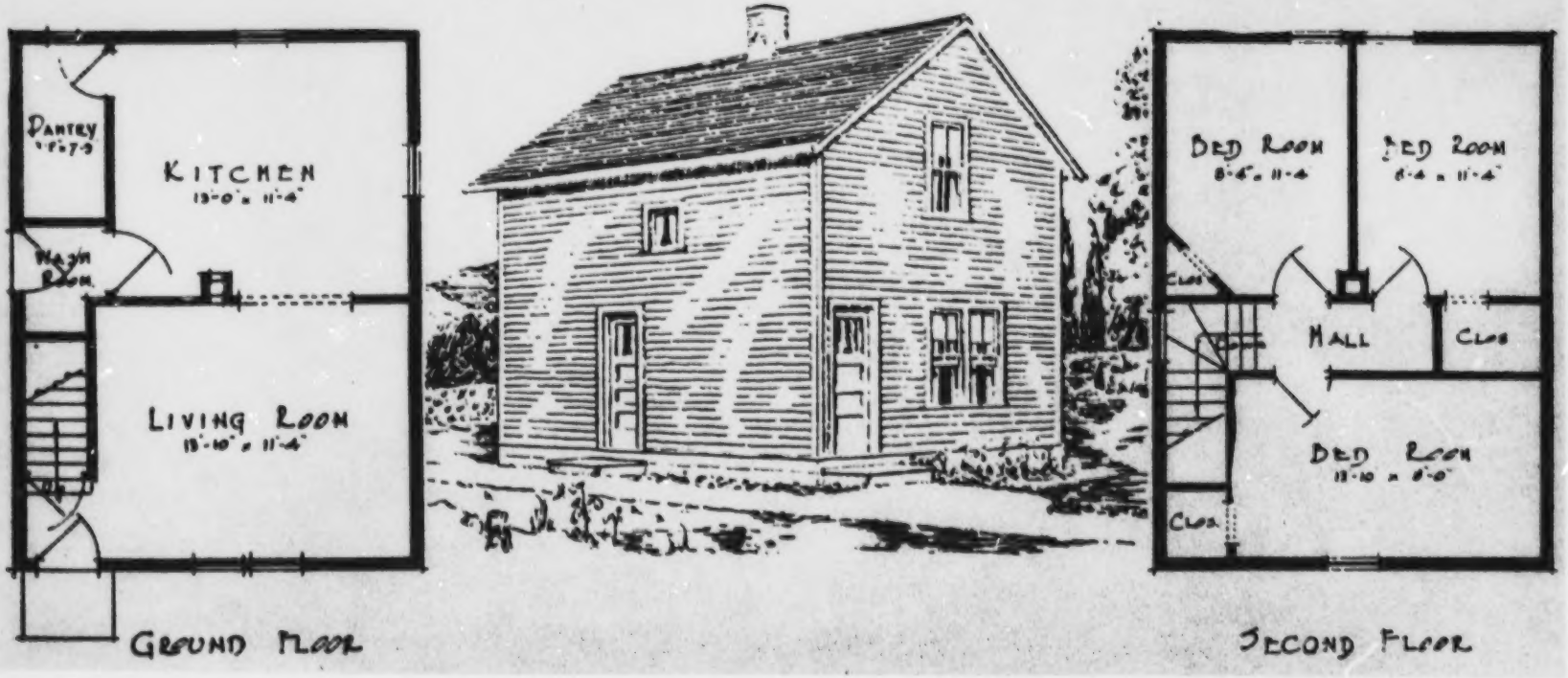
79 Gable and shed-roofed combination, Albion Ridge, Alberta.
CIHB, 1974

SETTLER'S HOUSE

18' x 24'—14' studs

SETTLER'S HOUSE

THIS is an economical small house designed to meet the needs of settlers. Ground floor provides for good size living-room and kitchen, with pantry and wash-room at the rear. Upstairs are three bed-rooms and clothes closets. This is a most economical plan and is well suited to the needs of the settler with a small family.



80 Although a wide variety of alternative designs for small preliminary dwellings were available to settlers after 1914, variations on the one-and-one-half-storey gable-roof layout continued to be produced. This version, 18 feet by 24 feet, which appeared in a 1926 WRLA plan book, differed from turn-of-the-century examples mainly in the central location of its chimney.
WRLA, *Plans for the Home Builder....* (Winnipeg: 1926), n.p.

One-Storey Cottages and Houses

One-Storey Cottages and Houses

Small one-storey dwellings enjoyed widespread popularity on Prairie farms before 1920 due to their low construction and heating costs. Before 1914, such houses were commonly called "cottages"; after that date most one-storey plans were described as bungalows or simply as farmhouses, although "cottage" was occasionally used, as in the case of the "Colonization Cottage" recommended by the Soldiers' Settlement Board in 1918–19 for the veterans who were taking up new farms (Figs. 85, 86).

In its most rudimentary form the cottage was an austere square structure with a pyramidal roof, not dissimilar to workers' housing found in industrial towns and cities in the late 19th century. Many cottages were simply truncated versions of the two-storey "square house" (*see* below).

Free plans for efficient, inexpensive one-storey houses suitable for both new settlers and farmers with limited capital were widely available after 1914. Many called for square or near-square layouts, with the chimney located in the middle for optimum heat distribution from the cookstove. In the case of the Saskatchewan College of Agriculture and B.C. Forest Service plan (Fig. 93), future expansion entailed adding a second floor rather than the conventional practice of building a wing.

81 A hip-roofed cottage located ten miles east of Wilkie, Saskatchewan, ca. 1910–12. The chimneys are centrally placed.
Saskatchewan Archives Board, Photograph No. R-B130(1)

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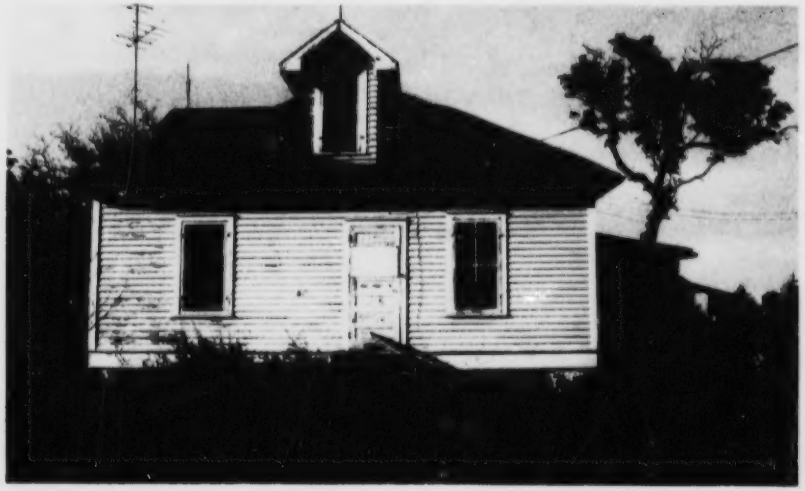

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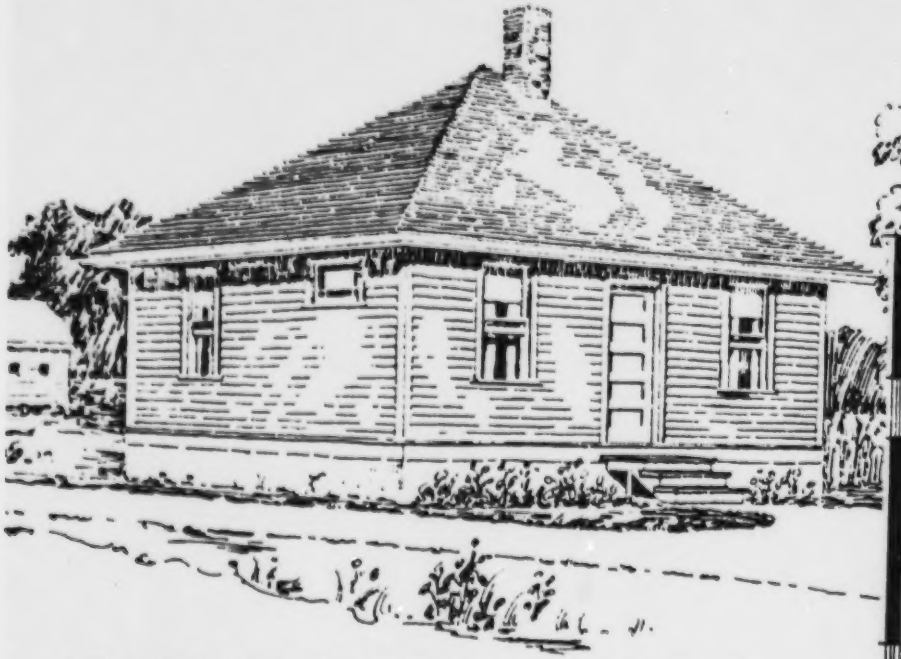
82 Hip-roofed cottage, Boomerang Lake, Saskatchewan. A verandah formerly shaded its front and sides.
CIHB, 1972

83 Hip-roofed cottage at Spring Coulee, Alberta.
Photo by G.E. Mills, 1985

84 Hip-roofed cottage with dormers, Maymont, Saskatchewan.
CIHB, 1976



COLONIZATION COTTAGE

22′ x 22′—8′ studs

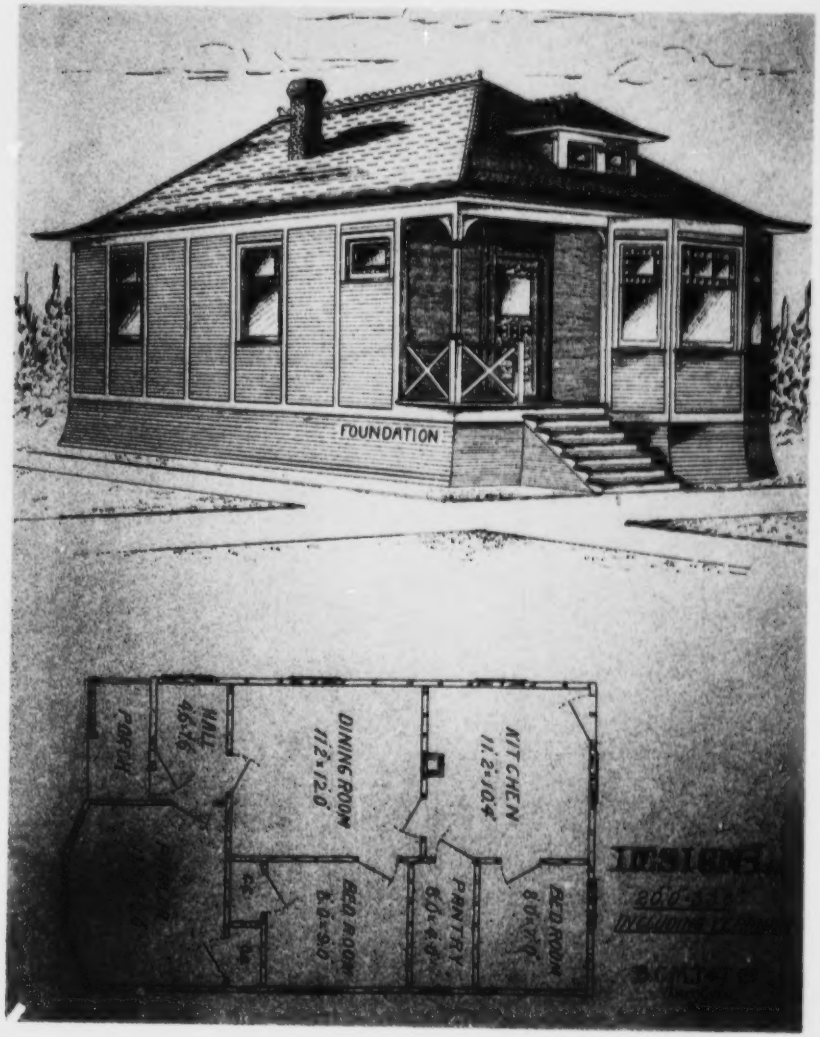
COLONIZATION COTTAGE

THIS cottage design is the one adopted by the Soldiers' Settlement Board and reported by them as being very satisfactory. Plan provides for good size living-room and kitchen with two bedrooms and two clothes closets. Provision is also made for a small basement.

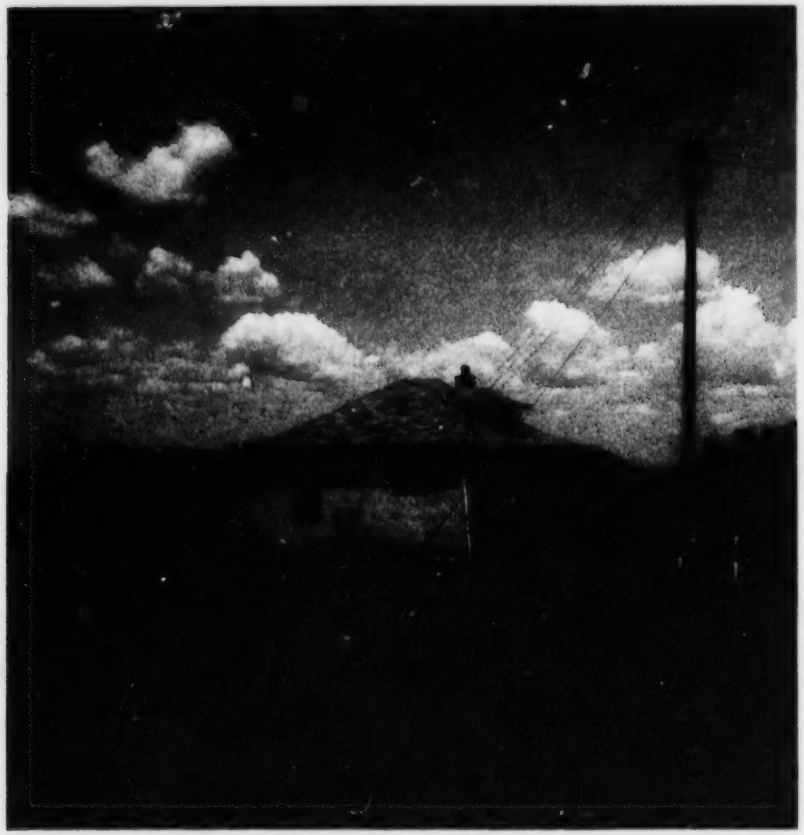
85 The WRLA version of the "Colonization Cottage," 22 feet square, "adopted by the Soldiers' Settlement Board."
WRLA, *Plans for the Home Builder....* (Winnipeg: 1926), n.p.

86 A specimen of "Farm House Type B" was erected by a Winnipeg firm for the Soldiers' Settlement Board, May 1919.
Manitoba Archives, Foote Collection, 845

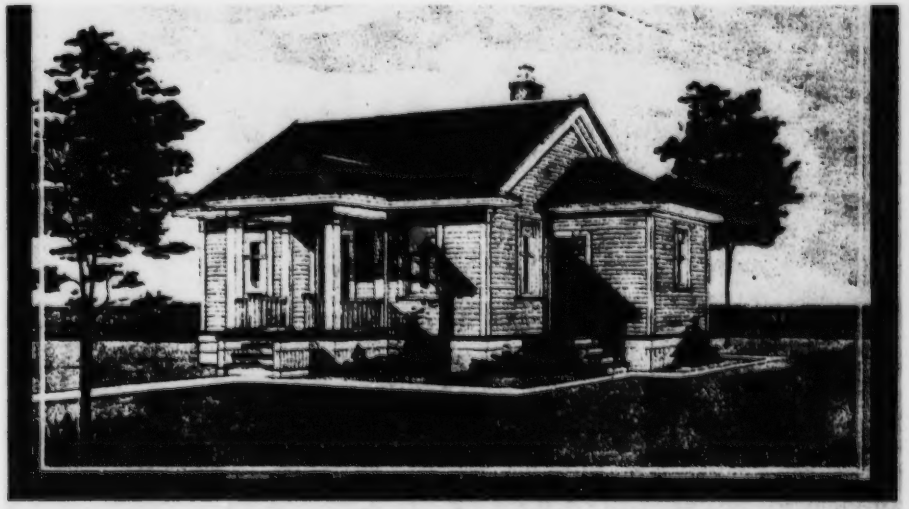
87 Plan for a settler's cabin, design C, in the 1905 B.C. Mills, Timber and Trading Company's *Catalogue of Patented Ready-Made Houses.*
Vancouver City Archives



88 Plan for a permanent one-storey cottage, design L, in the 1905 B.C. Mills, Timber and Trading Company catalogue.
Vancouver City Archives



89 A B.C. Mills prefabricated cottage at Cranford, Alberta. Its battened wall panels have been obscured by stucco.
Photo by G.E. Mills, 1985

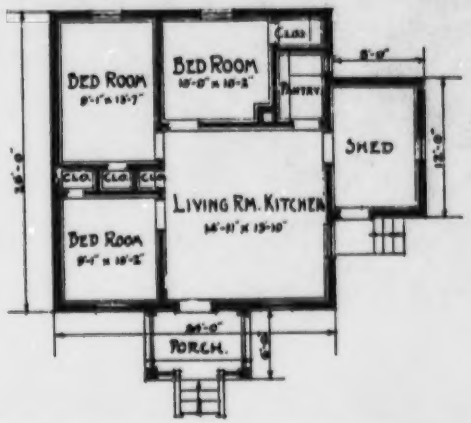


EASTACRE

EATON PLAN BOOK

E23

This home suggests a way to add to the usual four room cottage; notice the combination living room and kitchen with the bedrooms grouped around it. Each bedroom has a good roomy clothes closet and the pantry and wood shed are well situated, both opening off the kitchen. The plan calls for a surface foundation with a small basement excavated in the centre. Altogether a very desirable, inexpensive, home of cosy appearance.



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FOUR ROOMS

DIMENSIONS 24 x 26

9 FT. STUDDING

90 Eastacre, an Eaton's design for a four-room cottage, 24 feet by 26 feet.
T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 21; The Eaton Collection at the Archives of Ontario

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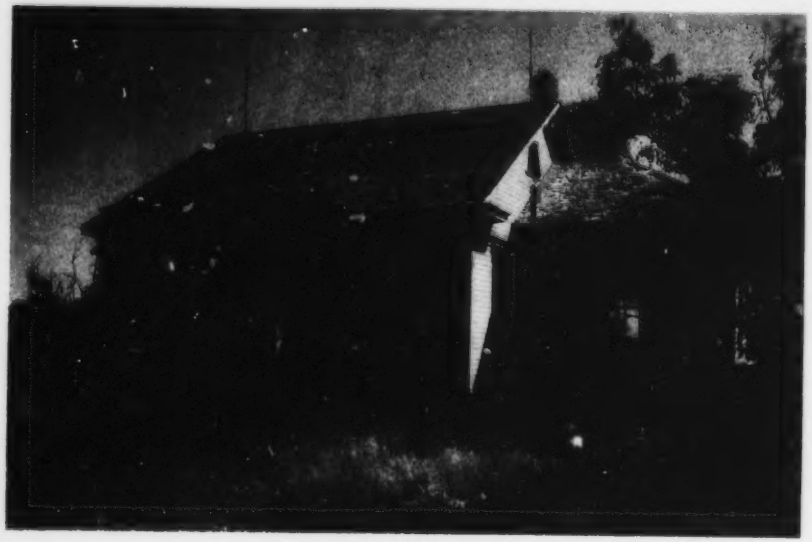

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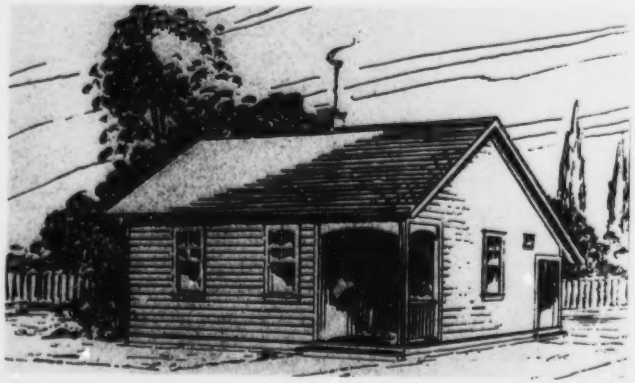
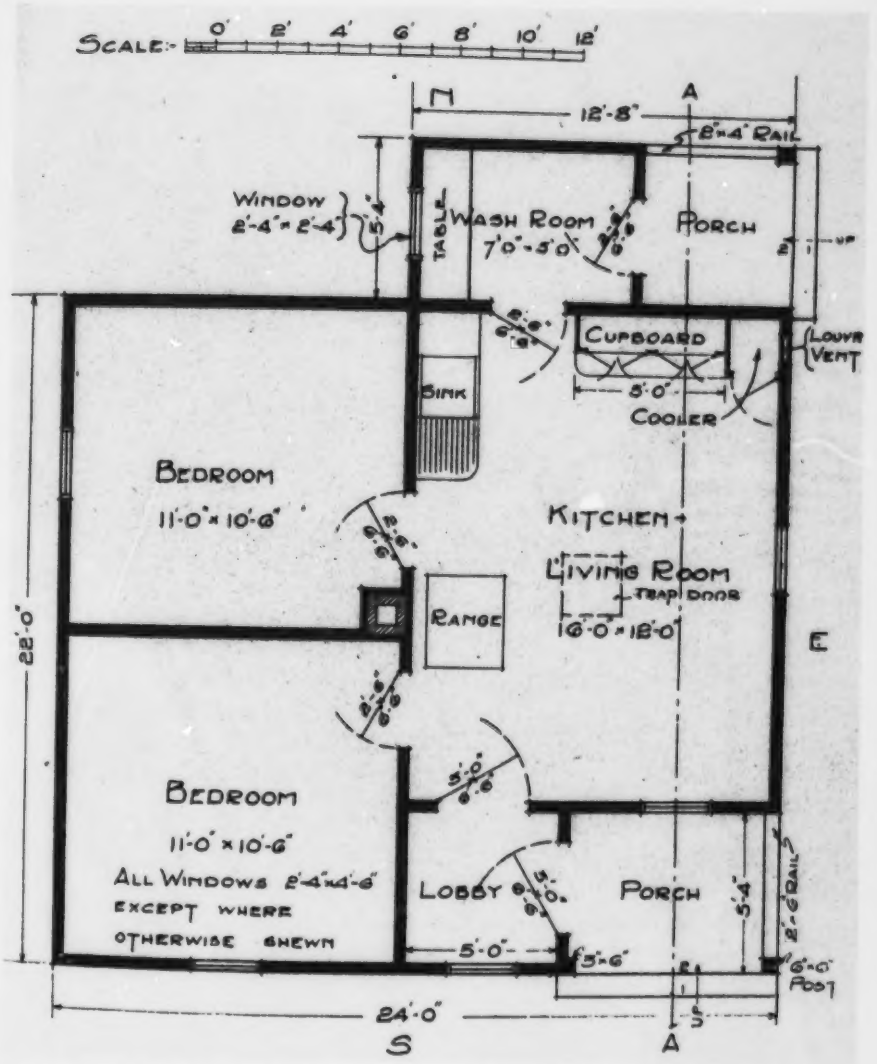
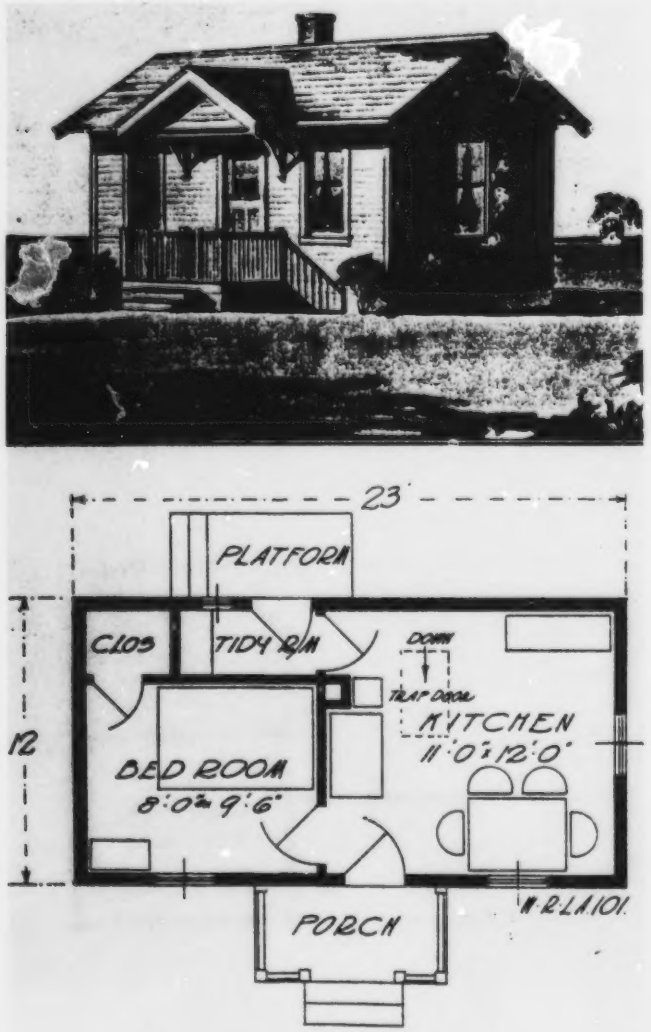


91 Eaton's Eastacre package cottage built around 1917 southwest of Harris, Saskatchewan.
Photo by F. Korvemaker; Saskatchewan Culture and Recreation, Heritage Resources Branch, 1985

92 "Farm House No. 1" was produced by the Saskatchewan College of Agriculture and published by the B.C. Forest Service in 1915.
B.C. Dept. of Lands. Forest Service, *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916) p. 12



93 Plan of B.C. Forest Service "Farm House No. 1" (Fig. 92). "The house will accommodate a family of four or five persons."
B.C. Dept. of Lands. Forest Service, *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916) p. 13



94 WRLA plan No. 101.
WRLA, *Plan Book of Houses and Farm Buildings for Western Canada* (Winnipeg: 1919), p. 3

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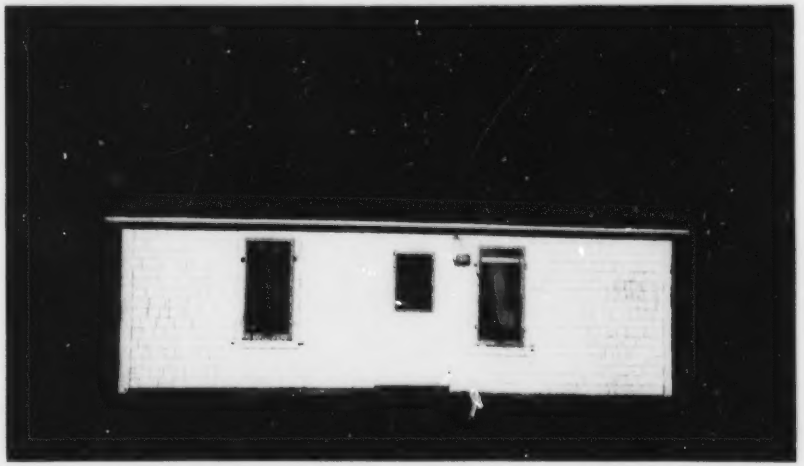

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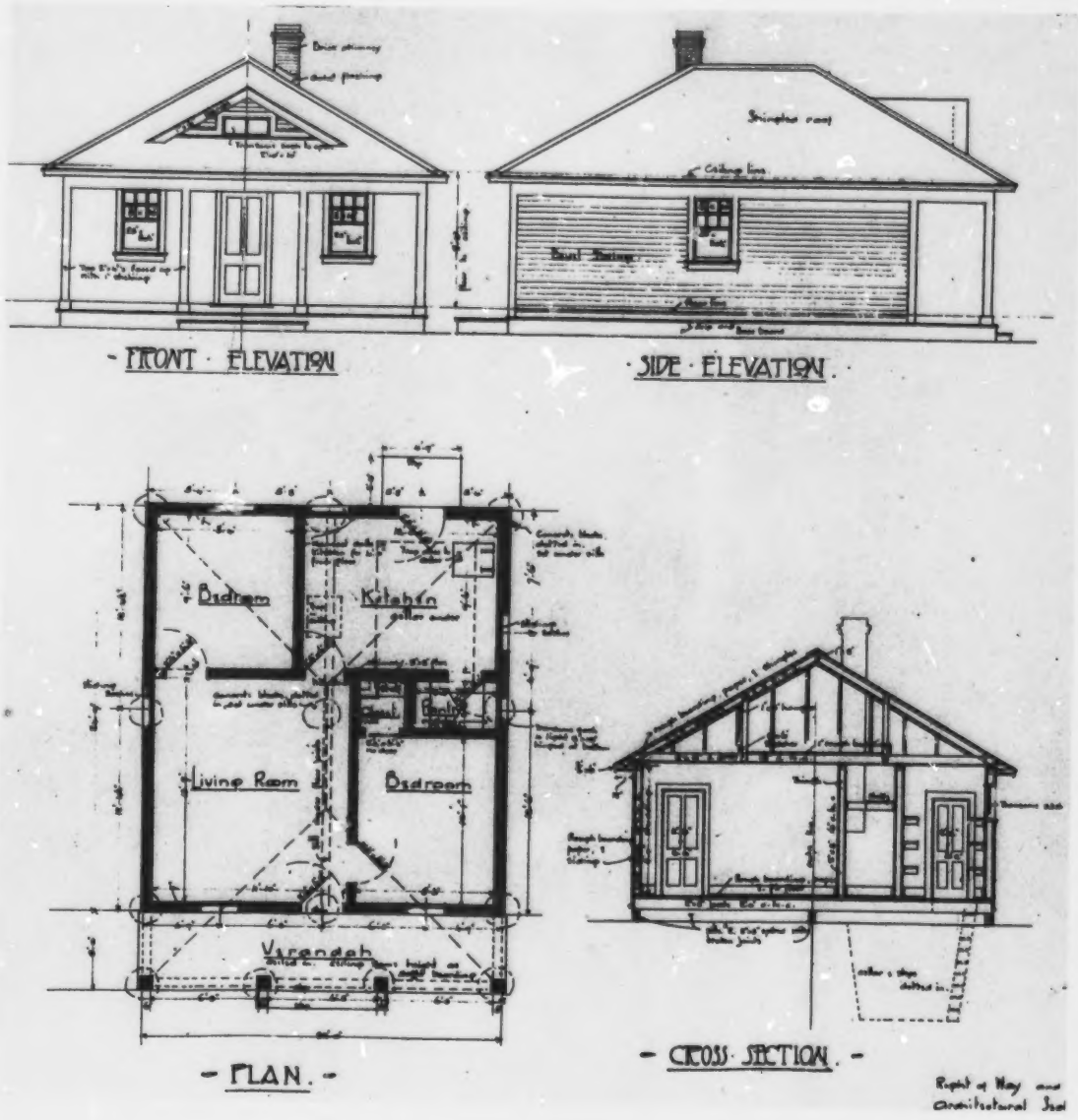
95 One-storey farmhouse, Blood Reserve, north of Cardston, Alberta.
Photo by G.E. Mills, 1985

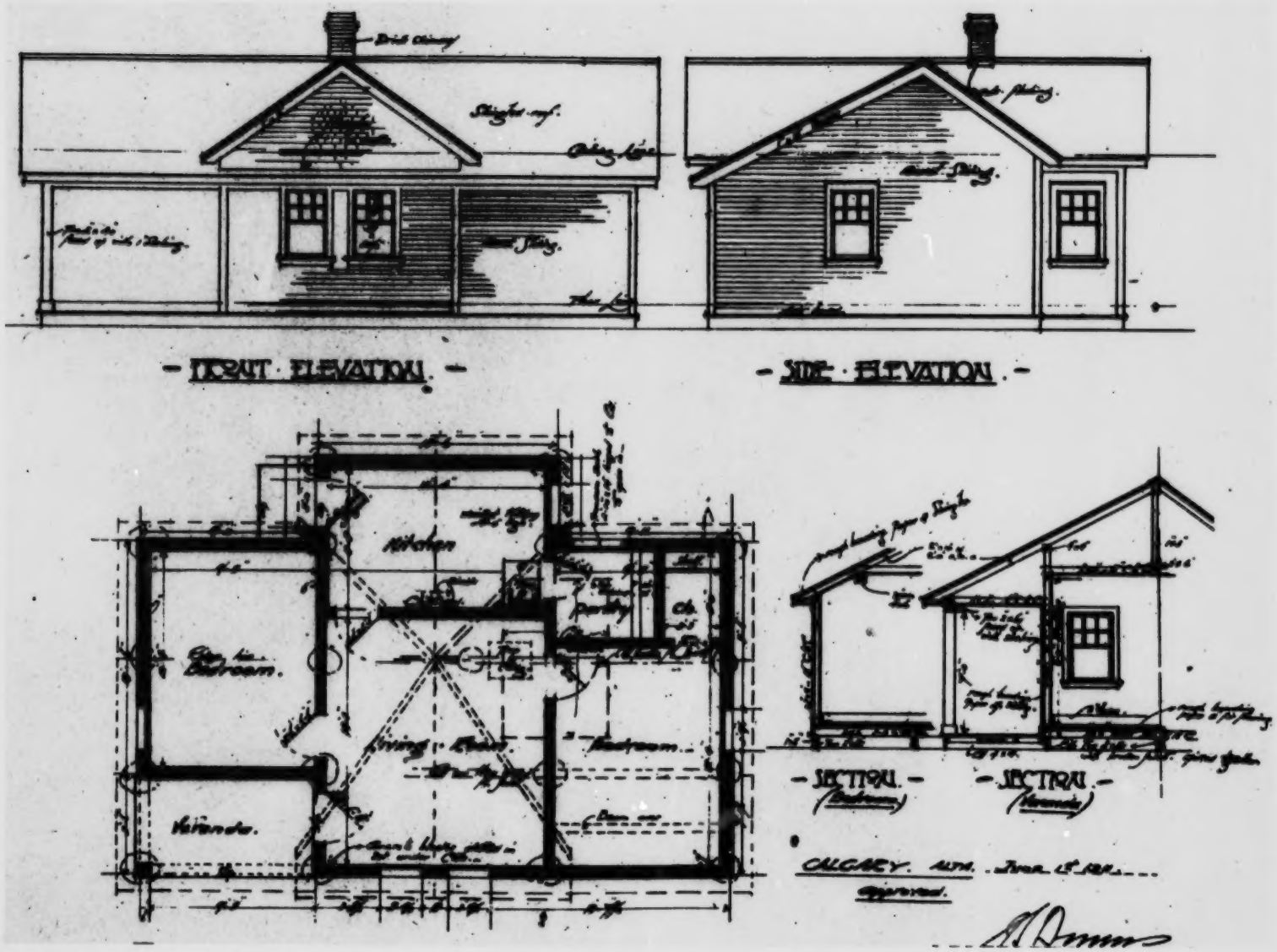
96 One-storey farmhouse, Carmangay, Alberta.
CIHB, 1974

Ready-Made Farmhouses

The CPR's house plans for its ready-made-farm colonies in eastern Alberta were early commercial responses to the problem of appropriate design for basic accommodation on the Prairies. Introduced in 1911, the compact one-storey house designs contained many features, such as centrally located heat sources, that subsequently appeared in designs prepared by other companies and by agricultural colleges.



97 CPR ready-made farmhouse plan No. 1a, dated 1912. "Approximate Price ... $900.00."
Glenbow Archives, Calgary, NA 2829-5



98 CPR ready-made farmhouse plan No. 6, dated 1911. "Approximate Price ... $1,000."
Glenbow Archives, Calgary, NA-2829-13

99 CPR ready-made farmhouse, Gem, Alberta, 1914.
Glenbow Archives, Calgary, NA-500-5

100 CPR ready-made farmhouse, plan No. 1, Gem, Alberta.
CIHB, 1974

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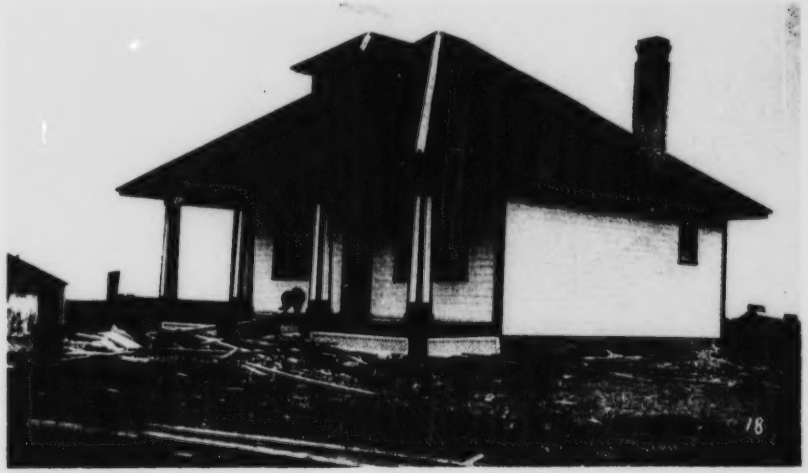

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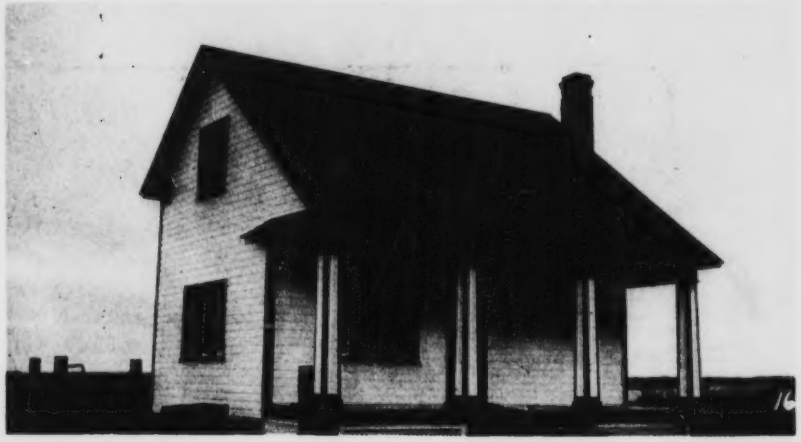


101 CPR ready-made farmhouse, plan No. 6, Gem, Alberta.
CIHB, 1974

102 Ready-made farmhouse built in Saskatchewan's Touchwood Hills in 1912 by the William Pearson Company.
Manitoba Archives, Settlement Collection, 282

103 Ready-made farmhouse built in the Touchwood Hills in 1912 by the William Pearson Company.
Manitoba Archives, Settlement Collection, 281

Bungalows

Bungalow designs were first introduced on the Prairies around 1910. That February the *Farm and Ranch Review* described the novel style:

> Every decade has certain ideas that are most popular and which are shown in the buildings of that day. A short time ago a two-storey square house with high foundation and high roof was the style. Just at present people are going to the opposite idea and the homes now built have long slanting roofs and lower foundations, the whole effect being of the bungalow or cottage idea rather than the house or mansion. We must admit, too, that these new houses have many advantages over the square high type. The whole effect of the bungalow is that it nestles into the earth and seems to belong to the landscape as much as the trees beside it.[1]

Like the cottage, the bungalow was fairly broadly interpreted. Early examples marketed on the Prairies were designs that had become popular on the West Coast, particularly around Vancouver, in the previous few years, and they looked decidedly exotic in comparison to the utilitarian structures that prevailed on the Prairies. But despite the *Farm and Ranch Review*'s enthusiasm, bungalows remained novelties on the Prairies for the next four to five years. By 1915 the term was being applied to a variety of plans more adapted to housing priorities in the region, and these more subdued versions of the bungalow became standard features of most plan books and mail-order firms from that time on.

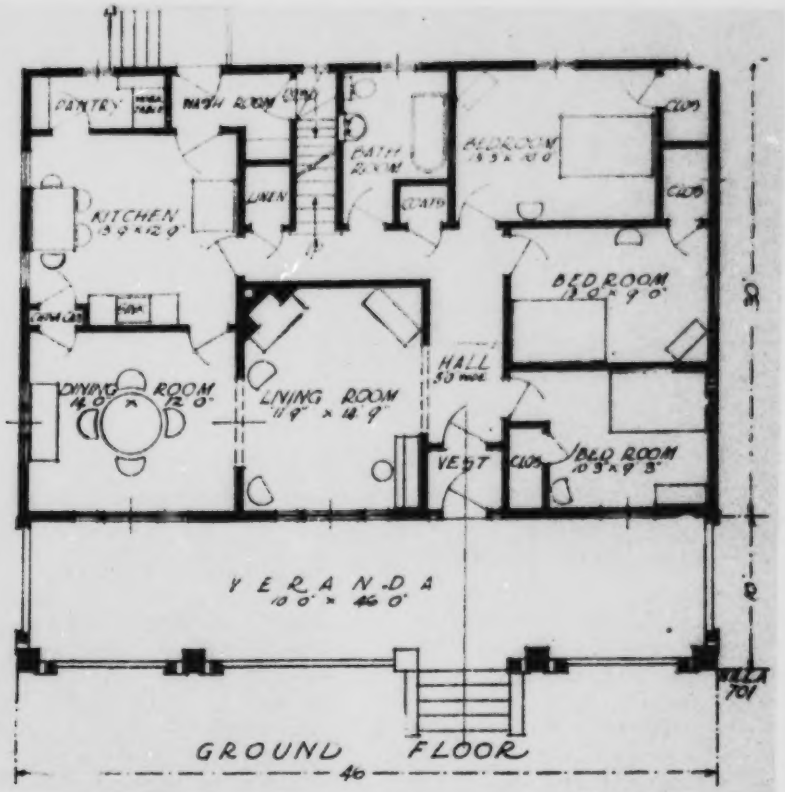
The bungalow label was frequently applied to a gable-roof plan in which the front roof slope extended to cover a verandah, with a shed- or gable-roofed dormer set in the middle of the slope. In some instances the roof pitch was raised and the dormer increased to permit greater space on the upper floor. A fairly broad roof overhang, decorative brackets, and exposed rafters were commonly associated with the bungalow style. Another common ingredient was the extensive use of shingles for wall covering, particularly on gable-ends and dormers. The majority of examples recorded in the CIHB survey are located in Alberta, suggesting a definite regional preference.

A variation of the bungalow that was occasionally built on Prairie farms was a one-and-one-half-storey hip-roof design with front and side dormers. After 1915 the terms "bungalow" and "cottage" were used interchangeably to refer to small residential plans, usually one or one-and-one-half storeys with front verandahs, as typified by WRLA design No. 201 (Fig. 117) and the B.C. Forest Service's "Farm House No. 3" (Figs. 119–120). Decorative bracketing, exposed rafters, and other features initially associated with bungalows were being freely applied to other residential styles by 1915.

104 Bungalow at Crossfield, Alberta, built in 1912.
CIHB, 1974

105 Bungalow at Big Valley, Alberta, built in 1916.
CIHB, 1974

"The Western Canada Bungalow"—Specially attractive design of a bungalow built especially for the Western climate. Rooms are conveniently placed. Stairway at rear leads to storage in attic. The cheer and comfort of the living-room is greatly enhanced by its generous-sized windows and big fireplace.



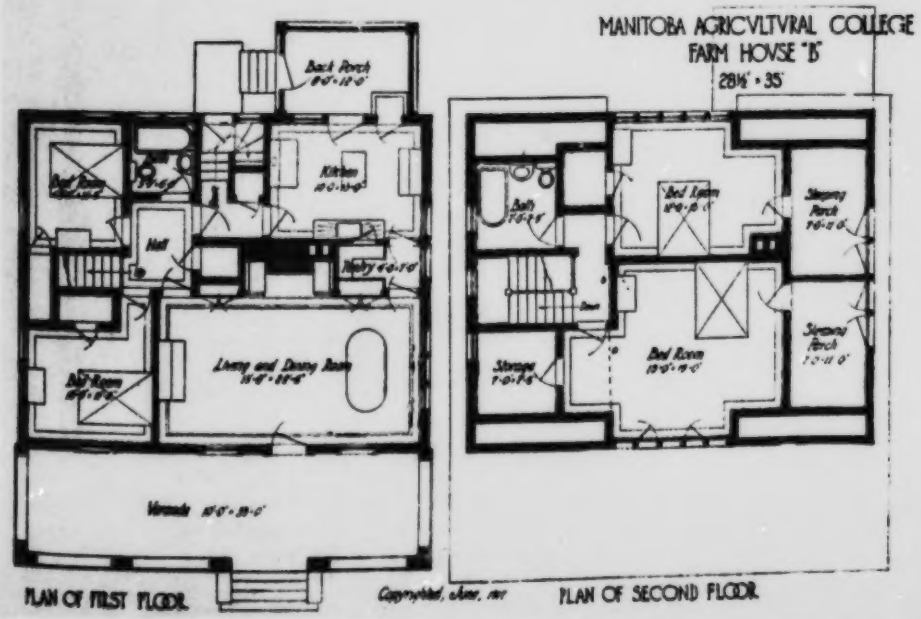
106 "The Western Canada Bungalow," prepared by the WRLA and featured in *Western Lumberman*, Vol. 13, No. 9 (Sept. 1916), p. 16.

MANITOBA AGRICVLTVRAL COLLEGE. FARM HOVSE "B". 28½'×35'

Figure 5

House Plan "B"

Comparatively few plans of bungalows were submitted in the Better Farm Homes Competition. This fact should not be taken too seriously as evidence that the bungalow has no place on the farms of the Northwest. From the standpoint of external appearance, the bungalow is



107 A winning bungalow design in the Manitoba Agriculture College's competition for farmhouse designs in 1917.

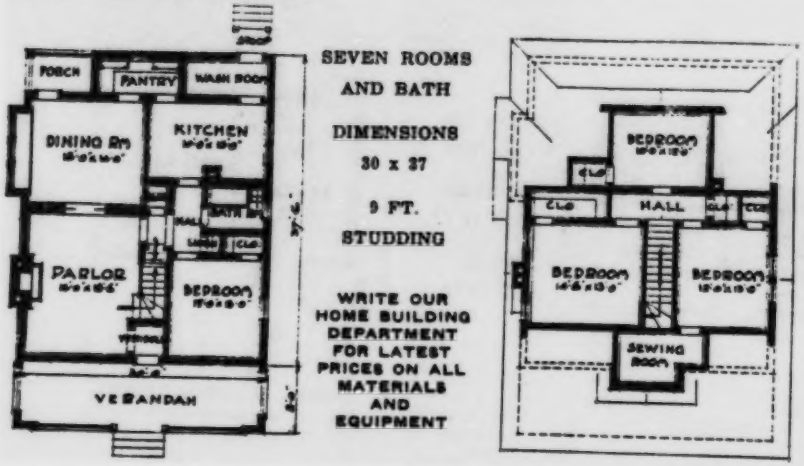
Leslie John Smith, *Better Farm Homes (A Bulletin of House Plans)* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1917), p. 7

EAGERVILLE

EATON PLAN BOOK

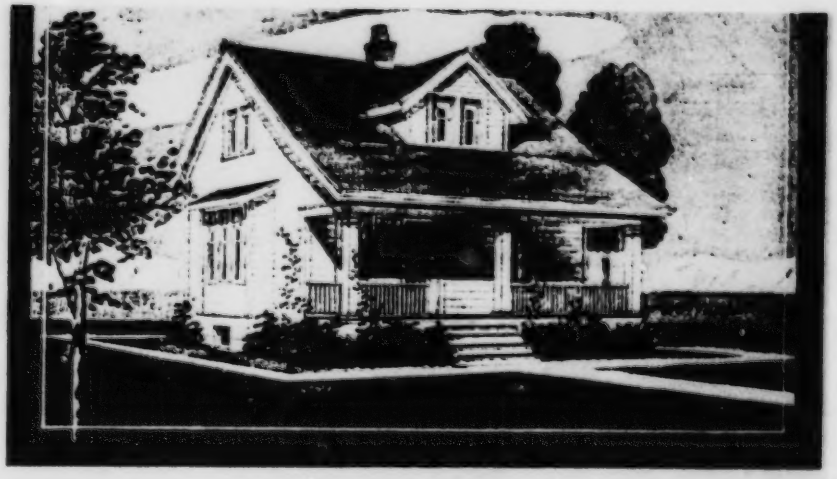
E34

Especially designed for those who prefer a bungalow type exterior with the facilities of a full two-story house. All rooms large and airy, full height ceilings to all second floor rooms. Large front veranda with small private one at the rear. Bathroom conveniently situated on ground floor.



108 One of Eaton's interpretations of the bungalow: the Eagerville, 30 feet by 37 feet. "Especially designed for those who prefer a bungalow type exterior with the facilities of a full two-story house."

T. Eaton Company, *Plan Book of Ideal Homes*, (Winnipeg: 1919), p. 32; The Eaton Collection at the Archives of Ontario

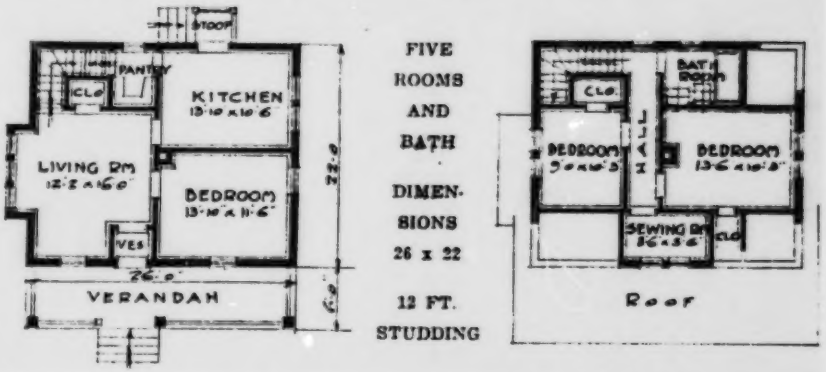


EATONCOURT

EATON PLAN BOOK

E10

This home has proved one of the most popular designs we have supplied the material for in the Prairie Provinces. Economical to build, simple construction with a very desirable layout of floor plans, makes this house a great favorite.



109 Another, smaller (26 feet by 22 feet), Eaton's bungalow, the Eatoncourt. "This home has proved one of the most popular designs we have supplied the material for in the Prairie Provinces."

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 8; The Eaton Collection at the Archives of Ontario

110

112

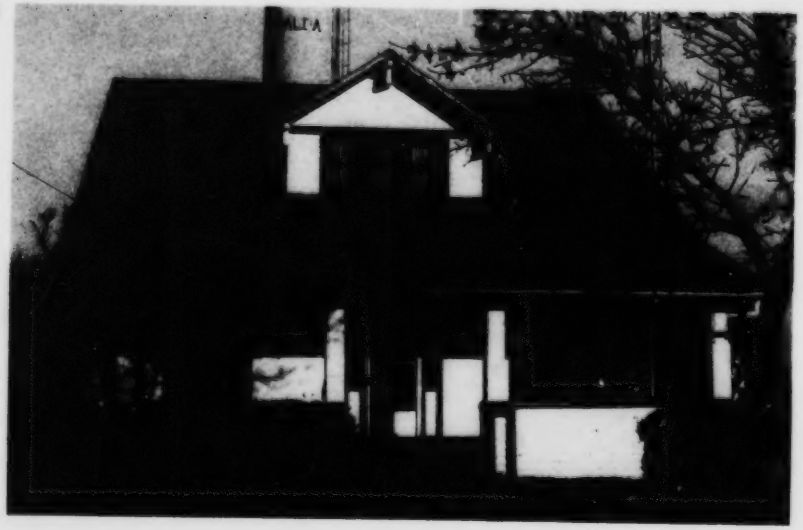
111

110 An Aladdin Readi-Cut bungalow at Val Marie, Saskatchewan.
Photo by G.E. Mills, 1989

111 Bungalow-style farmhouse at Namao, Alberta.
CIHB, 1974

112 Bungalow-style farmhouse at Radisson, Saskatchewan.
CIHB, 1976

113



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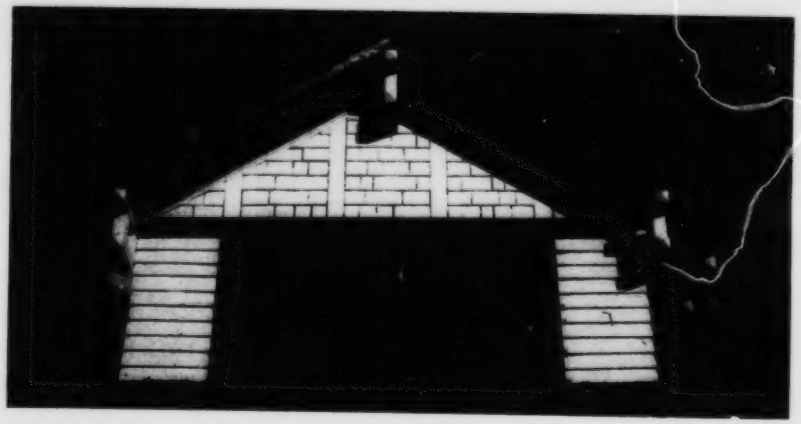

113 Bungalow at Donalda, Alberta.
CIHB, 1976

114 Dormer of the Donalda house (Fig. 113) showing the decorative brackets, exposed rafters, and shingling typical of bungalows.
CIHB, 1976

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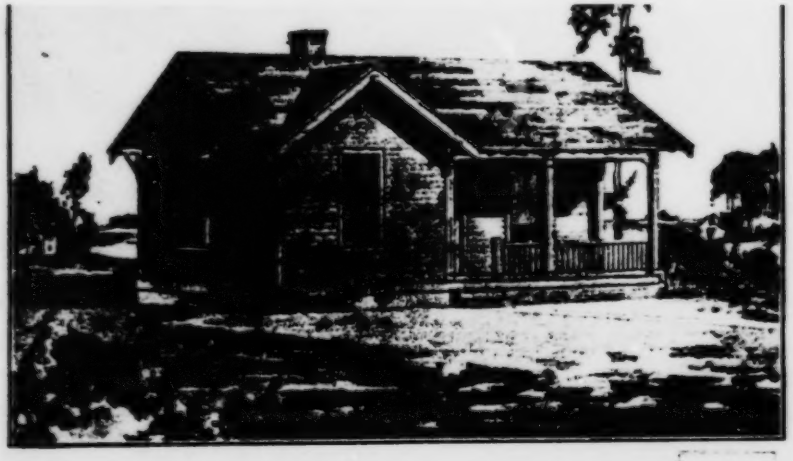
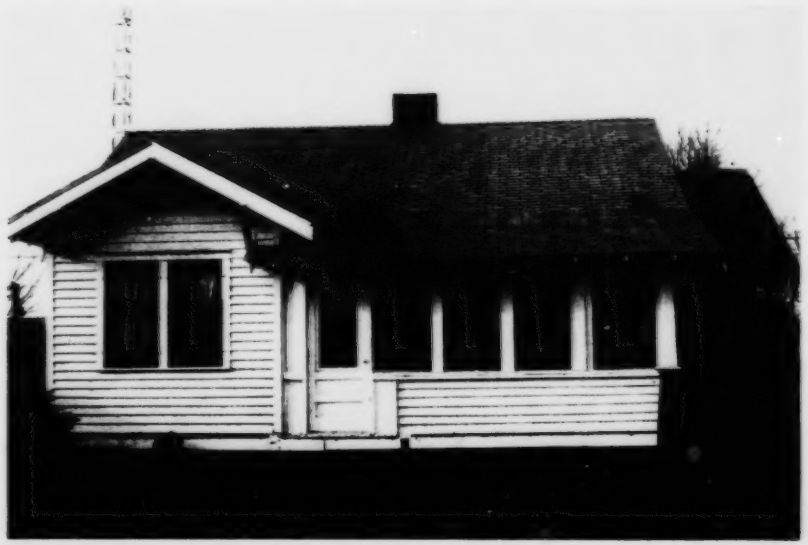
116

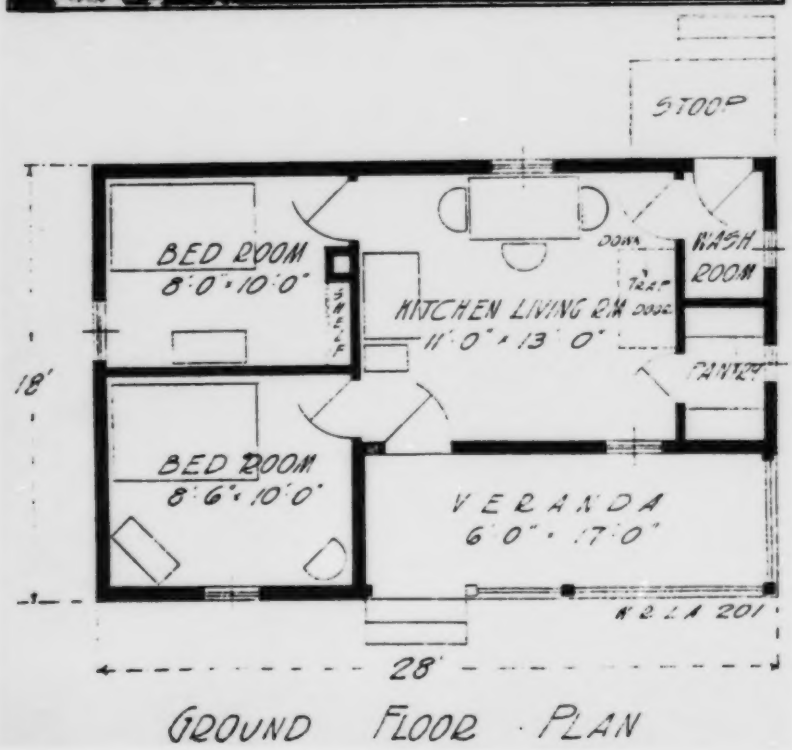
115 Bungalow-style farmhouse at Borden, Saskatchewan, built in 1912.
CIHB, 1974

116 Bungalow at Clarinda, Alberta.
CIHB, 1974





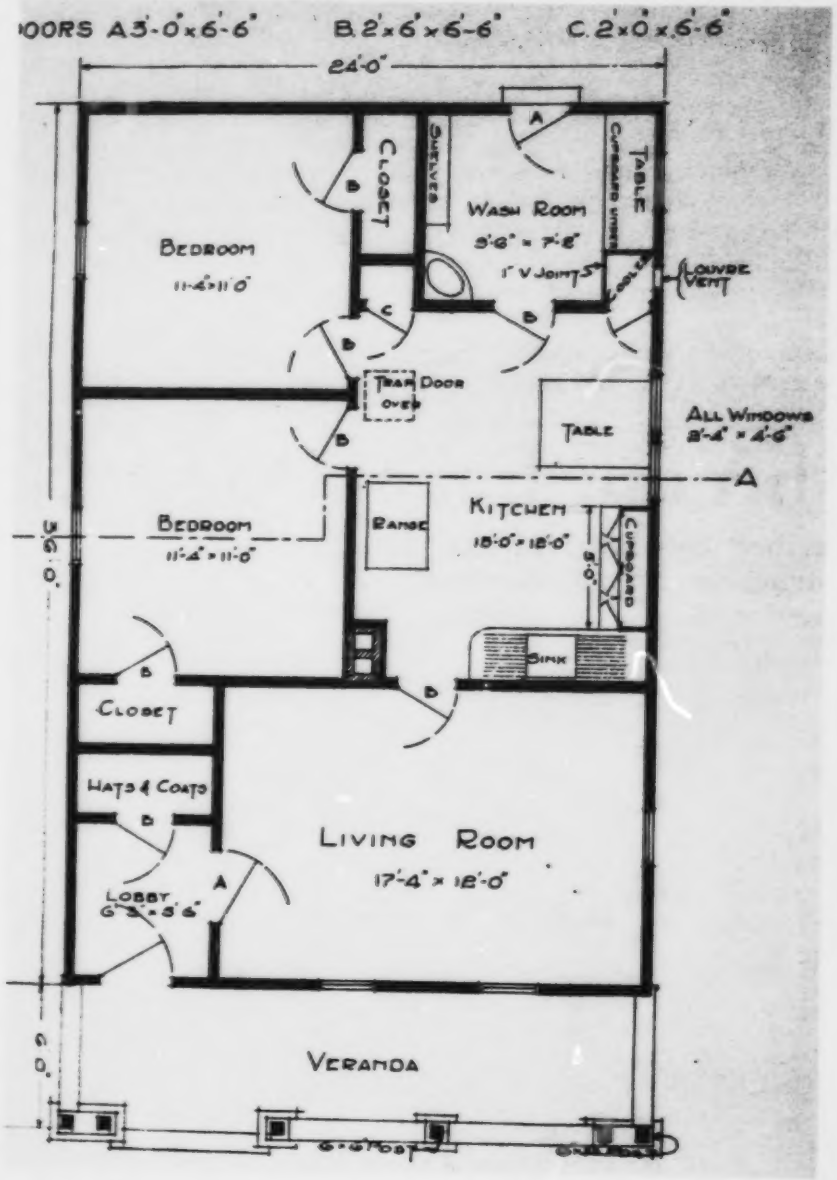
118 Bungalow at Bashaw, Alberta.
CIHB, 1974



117 The WRLA's design No. 201.
WRLA, *Plan Book of Houses and Farm Buildings for Western Canada* (Winnipeg: 1919), p. 5

119 Farmhouse No. 3, 24 by 36 feet, "designed in the bungalow style; very convenient in arrangement and low in cost," in the B.C. Forest Service pamphlet on houses.

B.C. Dept. of Lands. Forest Service, *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916), p. 27



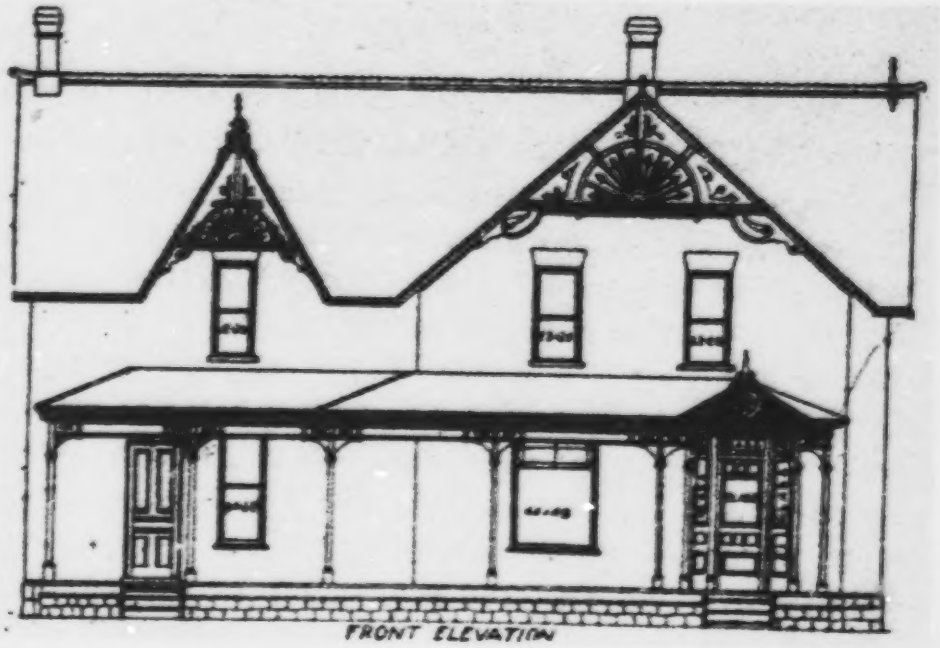
120 Farmhouse No. 3 "will accommodate a family of four or five persons."

B.C. Dept. of Lands. Forest Service, *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916), p. 27

Gable-Roofed Houses

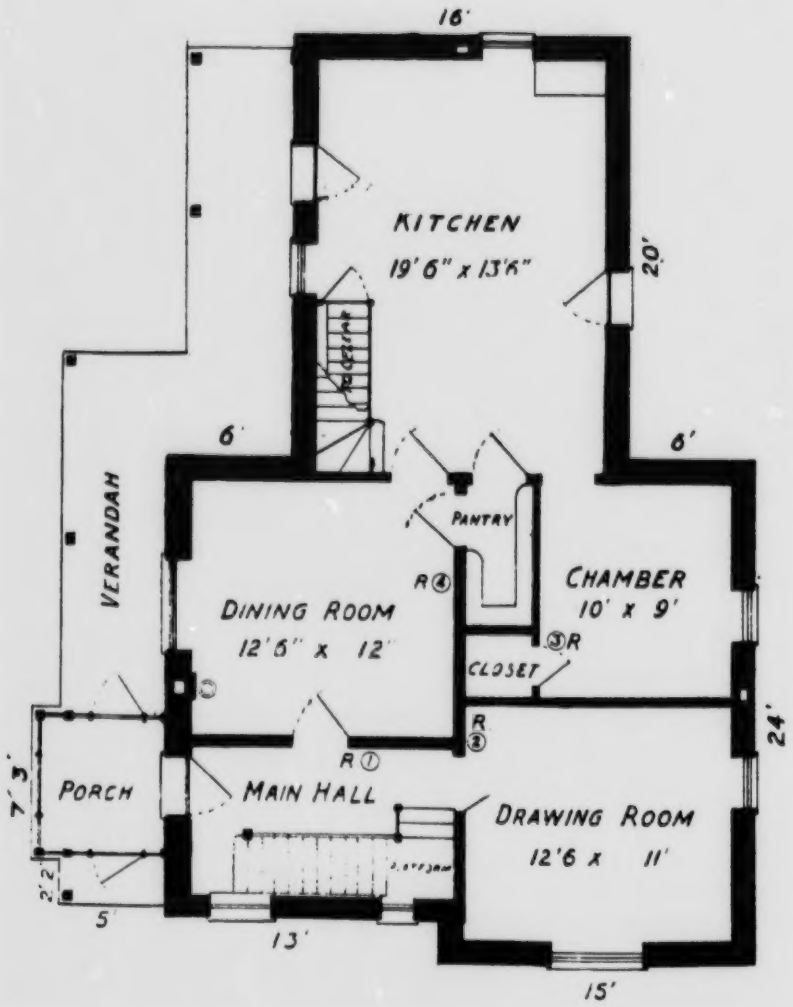
Centre-Gable and T-Shaped Houses

In the spring of 1904 *The Farmer's Advocate* published the plans and front elevation for John M'Dougall's farmhouse at Indian Head, for the interest "of those who contemplate the erection of a dwelling next season." The M'Dougall house typified the large models transplanted from eastern Canada during the early stages of Prairie settlement. A substantial number of "Ontario-style" farmhouses, frequently characterized by centre gables and T-shaped plans, were built of milled lumber in mixed farming regions, especially in Manitoba. The plans' popularity waned after 1910 and they were replaced by square plans that offered as much or greater floor area for less cost.

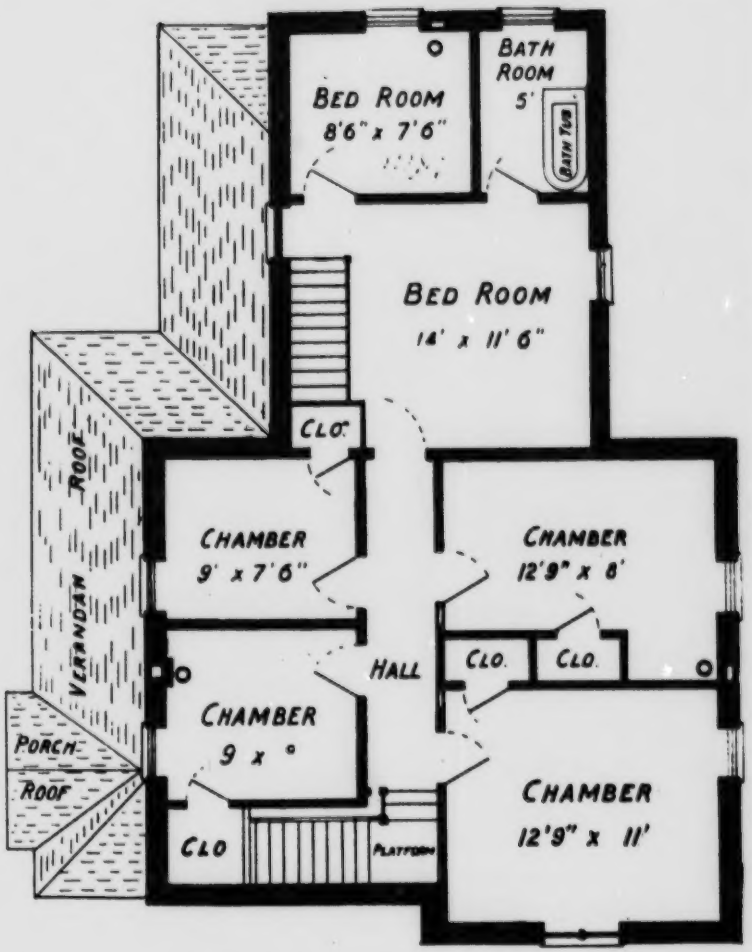


121 Front elevation of John M'Dougall's proposed residence at Indian Head, Northwest Territories.

"Plan of Modern Farmhouse," *The Farmer's Advocate and Home Journal*, Vol. 39, No. 600 (9 March 1904), p. 352



122 Ground-floor plan of John M'Dougall's proposed residence.
"Plan of Modern Farmhouse," *The Farmer's Advocate and Home Journal*, Vol. 39, No. 600 (9 March 1904), p. 352



123 Second-floor plan of John M'Dougall's proposed residence.
"Plan of Modern Farmhouse," *The Farmer's Advocate and Home Journal*, Vol. 39, No. 600 (9 March 1904), p. 352

124

126

125

124 Centre-gable farmhouse near Edmonton, ca. 1910.
Provincial Archives of Alberta, E. Brown Collection, B381

125 Centre-gable farmhouse at La Broquerie, Manitoba.
CIHB, 1972

126 Stock spindles and brackets on the La Broquerie house (Fig. 125).
CIHB, 1972

127

129

128

127 Phillip's T-shaped house, Clover Bar, Alberta, 1903.
Provincial Archives of Alberta, E. Brown Collection, B233

128 T-shaped farmhouse, Strathclair, Manitoba, built in 1909.
CIHB, 1974

129 T-shaped farmhouse, Carievale, Saskatchewan.
CIHB, 1973

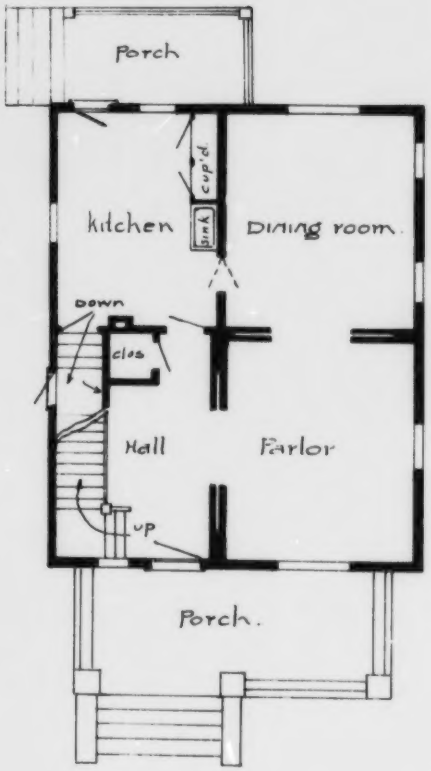
End-Gable, Side-Hall, and Cross-Gable Houses

House designs in American plan books ranged from the very small and simple to the large and ornate. Plan No. 37 in the 1910 edition of *Dustman's Book of Plans* was typical of countless one-and-one-half-storey gable houses being built on farms as well as in towns and cities before World War I (Fig. 131). It is referred to as a "side-hall" plan since the staircase is placed along the side wall immediately inside the hallway. This interior arrangement dictated the corresponding off-centre placement of the front door. Simple and inexpensive to build, the plan appears in numerous variations, from austere owner-built examples to commercially produced mail-order versions like those offered by the Winnipeg-based Lake Lumber Company in 1910 (Fig. 132).

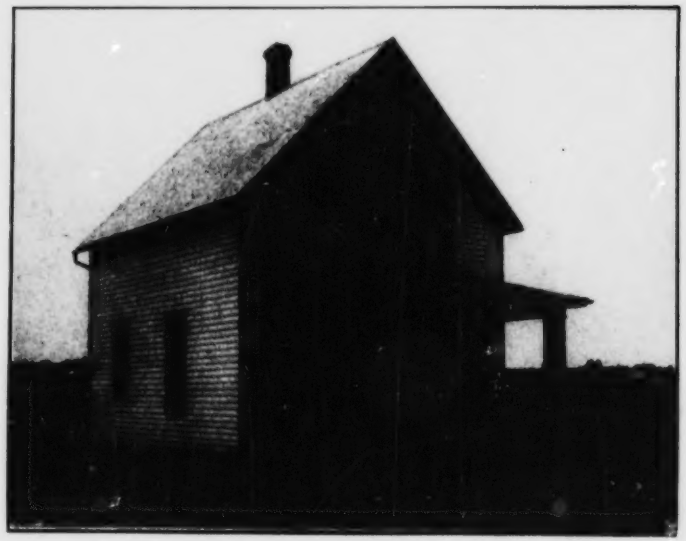
Cross-gable plans incorporated large gables on all four sides of a house, but usually retained a square or rectangular floor plan. The additional side gables increased the usable space on the upper floor (Figs. 135, 136, 140, 141).

130 An end-gable house, ca. 1912, likely built by its owner or a local carpenter using low-grade spruce siding. Published plans and mail-order house packages offered alternatives to scratch-built housing after 1909.

Manitoba Archives, Boissevain Community Archives Collection, 164



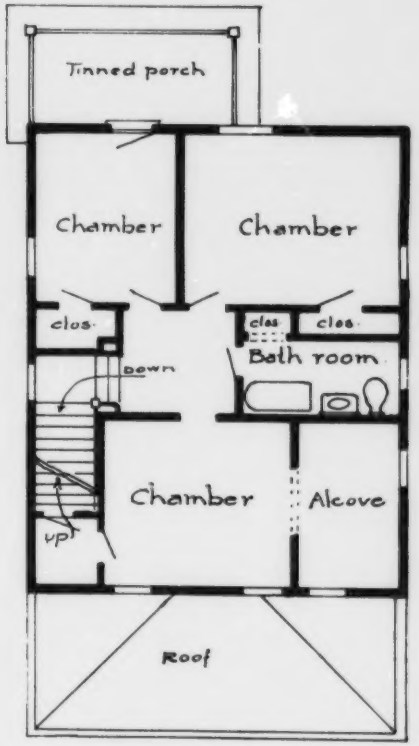
First Story Plan



Plan No. 37

This cottage, 22 ft. by 28 ft., was built for $1700, with hot air furnace and plumbing, yellow pine throughout. Ceilings regular height. This makes a very attractive and roomy cottage.

Cost of plans $7.00. Bill of material $5.00.

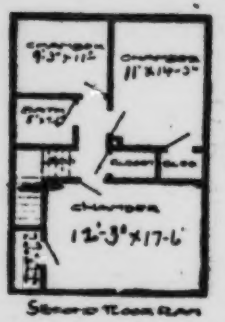


Second Story Plan

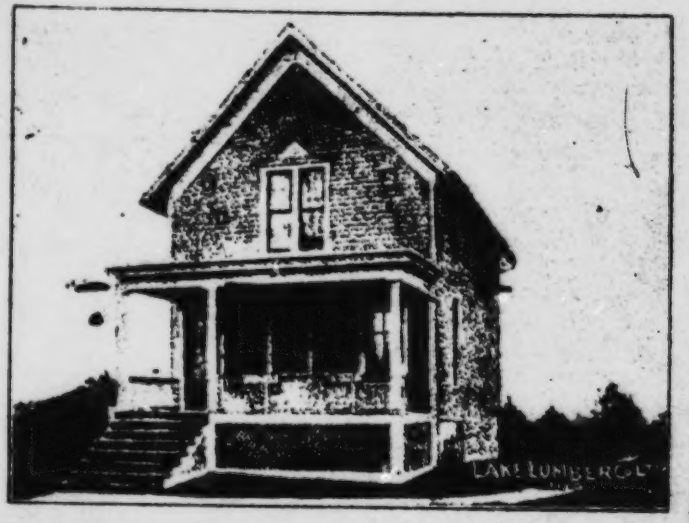
131 A side-hall house plan in the 1910 edition of U.M. Dustman's *Book of Plans and Building Construction...* (Chicago: Charles C. Thompson Co., 1910, p. 100) illustrates the side-hall arrangement used in many houses of this type.

Price includes Blue Prints, Architect's Specifications, Full Details, working plans and Itemized List of Material, with an Insurance Policy Free.

20 ft. wide by 30 ft. long. 14 ft. studs, a comfortable story and half house, the living room and dining room are large, with a cased opening between them and the hall; these rooms are practically thrown into one apartment, making a large living room; an effect that is much in demand at the present time. On the second floor there are three good bedrooms and a bath room with plenty of closet space



$632.00



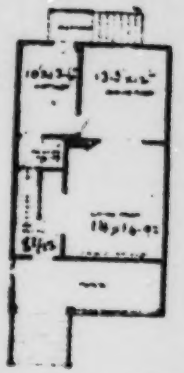
BUYS THE MATERIAL NEEDED TO BUILD THIS HOME!

With Protection from Fire for Three Years—Free

We Will Loan You the Money to Build

Our Guarantee

We guarantee absolute satisfaction in every detail. If you buy any material from us not as represented, we will take it back at our freight expense and return your money. We recognize the virtue of a satisfied customer. We will in every instance "Make Good."



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We Save You Big Money on Lumber and Building Material. The Lake Lumber Co. Ltd. is the largest company devoted to the sale of lumber and building material direct to the consumer. No one else can make you an offer like the one shown above. We propose to furnish you everything needed for the construction of this building except Plumbing, Heating and Masonry Material. Write for exact details of what we furnish. It will be in accordance with our specifications, which are so clear that there will be no possible misunderstanding.

LAKE LUMBER CO. LIMITED :: WINNIPEG

SEND US THIS COUPON TODAY!

LAKE LUMBER CO. LIMITED

I saw this ad. in

I am interested in

Mark X here if application blank for loan is wanted.

Name

Town

132 A Lake Lumber Company ad offering plans and materials for a 20-foot-by-30-foot side-hall house.
The Grain Growers' Guide, 12 Jan. 1910, p. 15

133

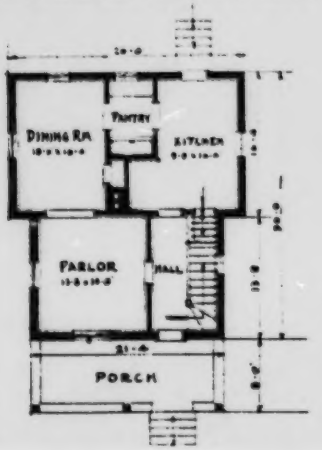
134

133 Farmhouse with a side-hall layout, Elfros, Saskatchewan.
CIHB, 1976

134 Side-hall-plan farmhouse at Croll, Manitoba.
CIHB, 1972

EASTCOURT
EATON PLAN BOOK
E37

If you wish for a small house and still desire to have a general air of prosperity, you will do well to give this design second thought. There are three rooms, hall and pantry on the first floor with a large oriel window in the parlor, while the second floor has three rooms and bath all well lighted.



SIX ROOMS
AND BATH

DIMENSIONS
26 x 30

18 FT.
STUDDING

WRITE OUR
HOME BUILDING
DEPARTMENT
FOR LATEST
PRICES ON ALL
MATERIALS
AND
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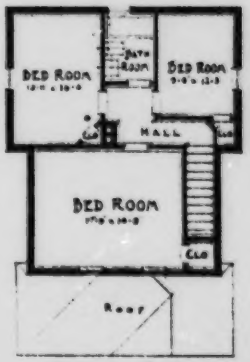


135 Variations on the end-gable or side-hall plan were offered by many commercial firms after 1910. This modified cross-gable design, the Eastcourt, 26 feet by 30 feet, first appeared in Eaton's catalogues in 1912.
T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 35; The Eaton Collection at the Archives of Ontario

136 The plans and materials for this residence at Swanson, Saskatchewan, were purchased from Eaton's in 1918.
CIHB, 1974

$2.50 for complete plans and specifications of this fine residence.

We make a great saving for the Farmer in the erection of his buildings. **No matter what you are going to build** consult us and save money.

We will tell you exactly what it will cost for your material complete f.o.b. your station. We will advise and help you in many ways. We will design your buildings to your own liking, and guarantee to furnish material for their proper construction at a price that will be a great saving to you.

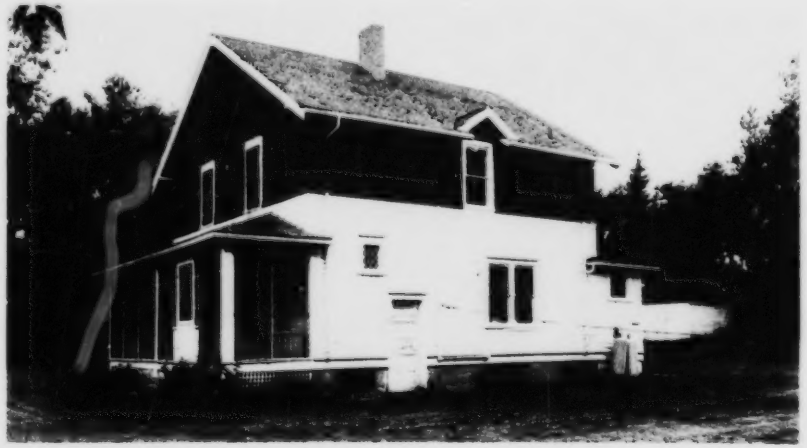
It only costs a post card to find out what we will do for you and get our FREE catalogue and information regarding our Free plan service. Write NOW

PRAIRIE BUILDERS LIMITED
Calgary **Alberta**

(Mention this paper.)

137 Prairie Builders Limited of Calgary offered this end-gable house in 1916. Catalogue houses frequently displayed detailing such as decorative gable shingling and verandah trim that farmers or local carpenters often omitted when they built from scratch.
The Nor'-West Farmer, 5 Jan. 1916, p. 44

138



139

138 End-gable farmhouse at Forest Bank, Saskatchewan.
CIHB, 1976

139 A hipped end-gable variation at Roche Percée, Saskatchewan. Its decorative gable shingling is still intact.
CIHB, 1976

140

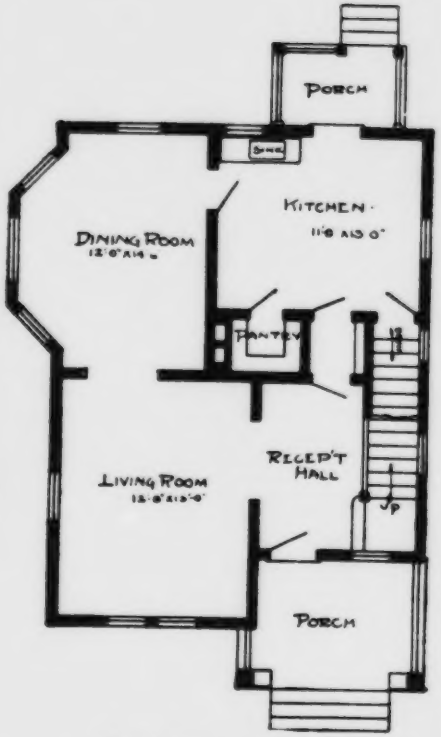
141

140 A cross-gable farmhouse at Lajord, Saskatchewan.
CIHB, 1974

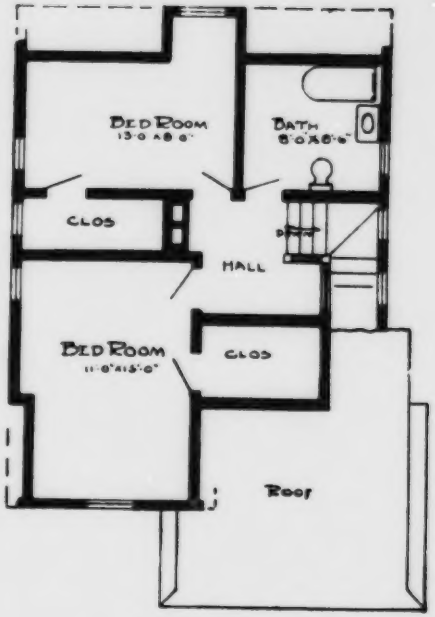
141 An Eaton's Eastbrook house at Lafleche, Saskatchewan, with a near-square, cross-gabled plan (*see* Fig. 42). The open side porch has been enclosed on this example.
Photo by G.E. Mills, 1989

L-Shaped Houses

The general shift in the proportions of rural houses is particularly evident in the L-shaped examples. Those built before 1912 usually display the extended proportions commonly associated with eastern models, whereas later designs tended to be more compact and closer to a square plan.



First Floor Plan



Second Floor Plan

142 Compact variations on the L-shaped plan first appeared in American plan books in the 1900s. This example, design 7041 in Radford's *Combined House and Barn Plan Book...* (Chicago: Radford Architectural Co., 1908, p. 46), is 26½ feet by 31½ feet, excluding the porches.

143 A compact L-plan house at Rosthern, Saskatchewan.
CIHB, 1974

144 L-shaped farmhouse at Bracken, Saskatchewan, based on a WRLA plan.
Photo by G.E. Mills, 1989

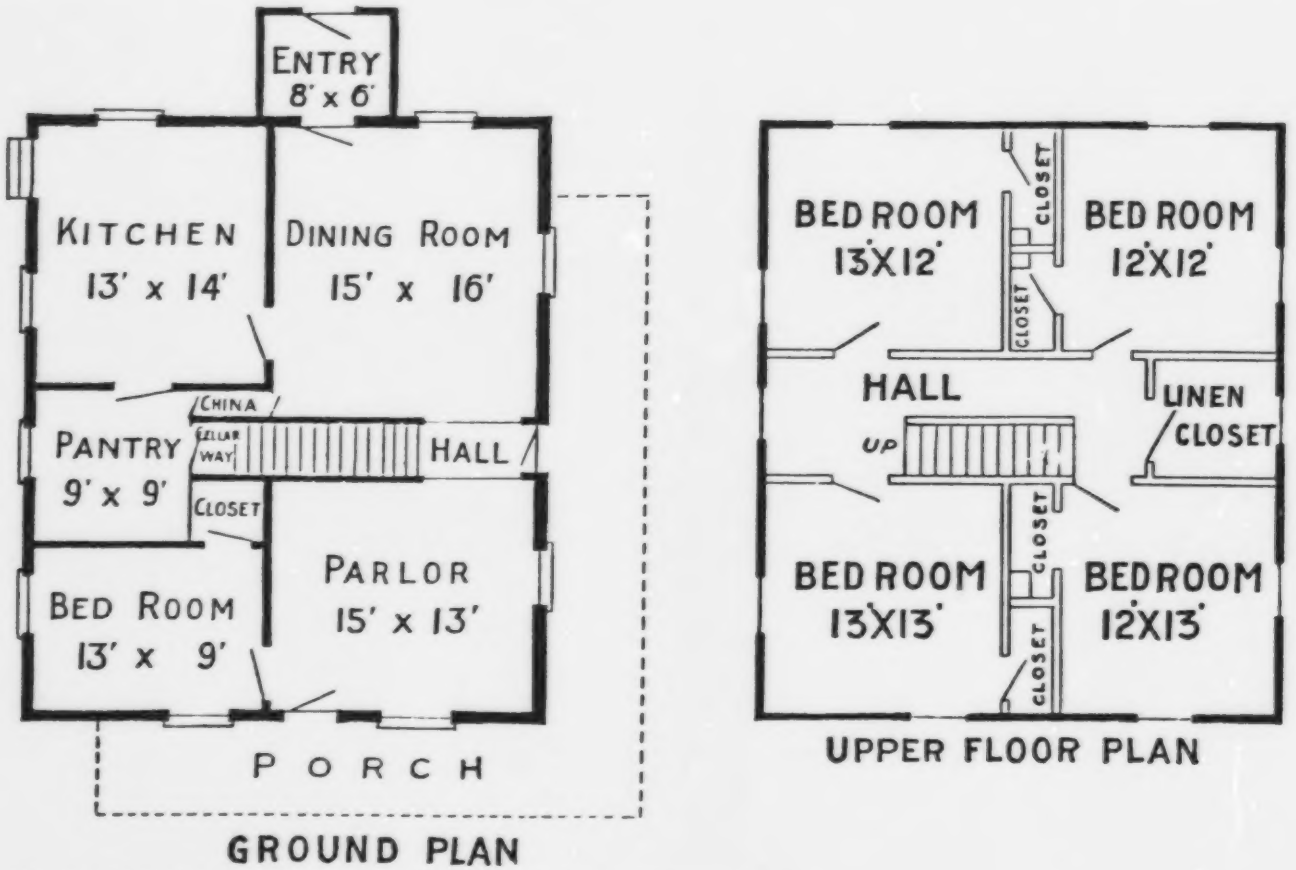
Square Houses

One of the more popular house plans that appeared in western Canada after 1900 was the two-storey "square house," so-named because of its box-like appearance and square or near-square floor plan. The design was first popularized during the 1890s in suburban and rural areas of the U.S. where it also became known as the "Four Square House" due to the standard layout of four rooms on each floor. In its most basic form it was devoid of projections apart from a front verandah and possibly one or more dormers. The roof arrangement varied somewhat, depending on whether the floor plan was square or slightly rectangular. If the plan was square, a pyramidal or truncated hip roof was used; if the plan was rectangular, a medium-pitch hip roof was employed. Square houses typically contained four bedrooms on the upper floor and a reception hall, kitchen, parlour, dining room, and possibly an additional bedroom, on the ground floor. Square houses were featured in most plan books and mail-order catalogues aimed at the Prairie farm market from 1910 onwards.[1]

Eaton's promoted the two-storey square house as "the one type where you obtain the maximum of space at the minimum of cost of both material and labour." The cost of all materials, excluding plumbing and heating, for its "Eastbourne" model (Fig. 154) was $1518.91 in 1914. After 1912, Eaton's designs often featured clapboard sheathing on the ground-floor exterior and cedar shingles on the upper storey. This arrangement, not unique to Eaton's houses, relieved the boxiness of the two-storey plan. The growing popularity of shingling for wall cover as well as roofing coincided with the product's steadily increasing production and promotion by B.C. manufacturers after 1914.

Adding projecting bays and wings brought variety to the basic square. Although such features could reduce the boxy appearance, they also increased construction and heating costs, and could complicate construction, which likely explains the comparative scarcity of the more elaborate versions on Prairie farms.

145 A square house at an unspecified location in Manitoba. It features the decorative second-storey shingling that became fashionable after 1912.
Manitoba Archives, Jessop Collection, 12

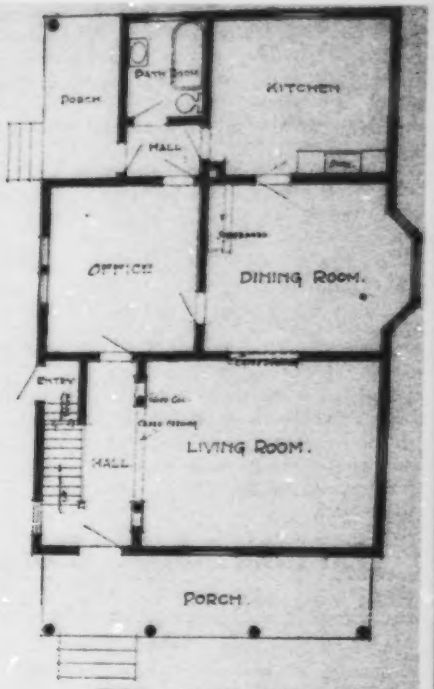


146 Floor plans for a square farmhouse submitted to *The Farmer's Advocate* in 1904 showed the typical arrangement of four rooms per floor with a central hall and staircase. The resident, who had assisted in its design and construction, noted that "it was planned to meet the needs of a family of eight grown sons and daughters, all at home. The nearly square, compact shape gives the most room, with the least expense; while the long porch, the dining room entry and a dormer window in the square roof, over the hall door, break the square, plain outline...."

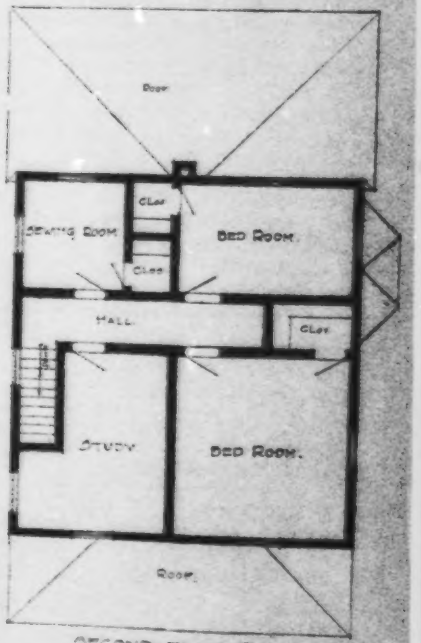
"A Pleasant Farmhouse," *The Farmer's Advocate*, Vol. 39, No. 602 (30 March 1904), p. 467

Exterior View of Dwelling from Front.

A Corner of the Interior.



FIRST FLOOR PLAN.



SECOND FLOOR PLAN.

147 A two-storey square house — "a well-arranged residence suitable for ... people of moderate means.... the estimated cost complete being $4,500" — was featured in a 1913 issue of the *Western Lumberman*. Rear one-storey summer kitchens were common features on houses of this type.

"A Residence for the Prairie Dweller," *Western Lumberman*, Vol. 10, No. 10 (Oct. 1913), p. 46

148

150

149

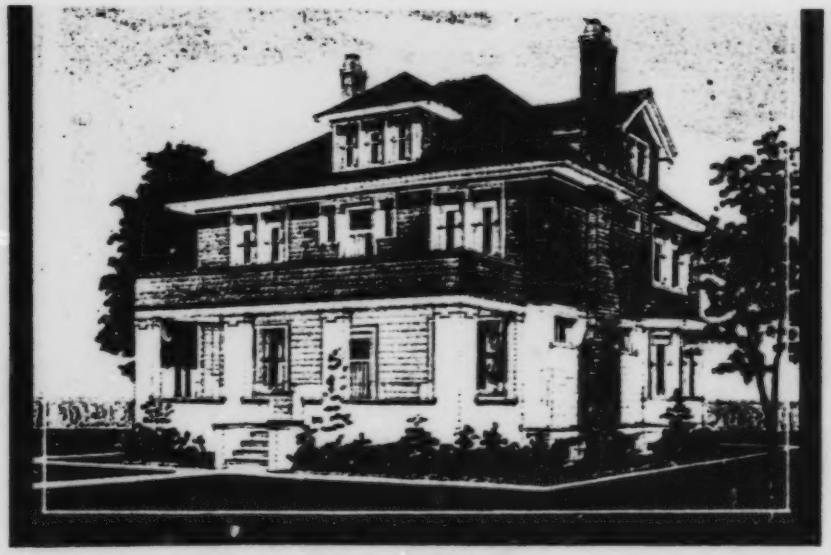
148 The Burke family building a square house on their farm in the Milo area of Alberta in 1917–18.
Glenbow Archives, Calgary, NA-1367-79

149 Square house at Burrows, Saskatchewan, built in 1908.
CIHB, 1973

150 Square house at Aberdeen, Saskatchewan, built in 1919.
CIHB, 1974

151 Square house at Dreghorn, Saskatchewan, built in 1909.
CIHB, 1970

152 Square house at Margaret, Manitoba.
Photo by G.E. Mills, 1989

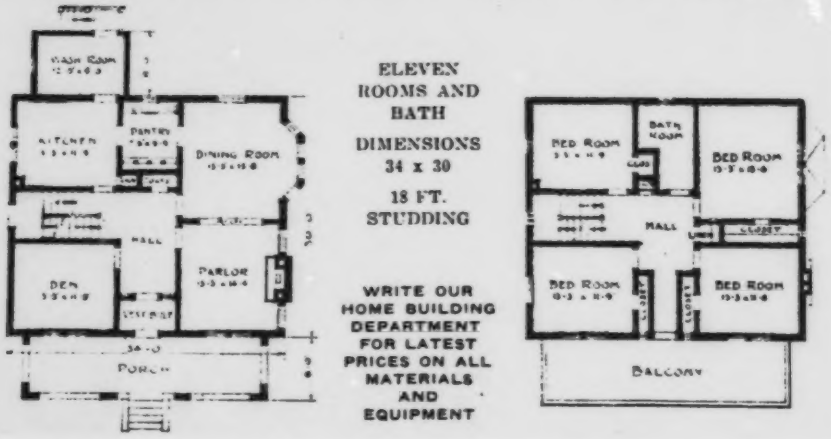


EARLSCOURT

EATON PLAN BOOK

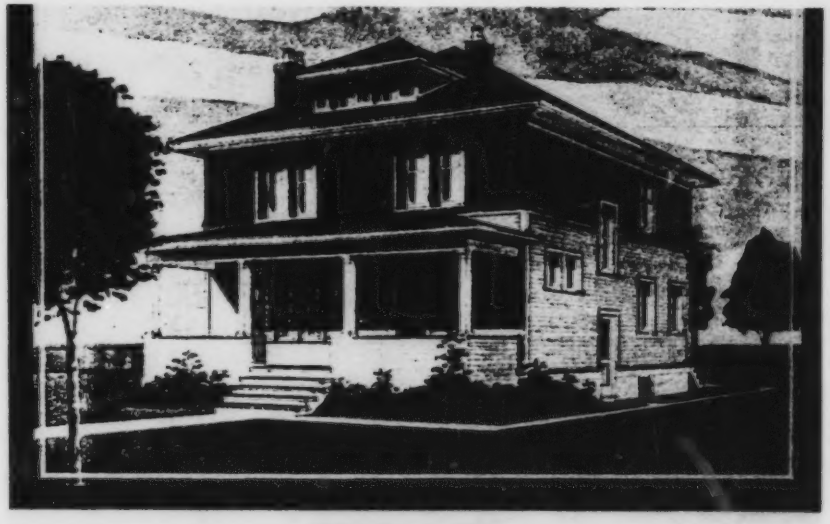
E17

A square house is the most economical kind to build. You will notice from the plans the generous floor space of this house. The parlor and dining room separated only with an arch makes an attractive feature of the interior arrangement; the rooms are large and well lighted. On the second floor are four splendid bedrooms each equipped with clothes closet. The third or attic floor has three bedrooms of good size.



153 An Eaton's plan for a square house, the Earlscourt, 34 feet by 30 feet. The third floor "has three bedrooms of good size."

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 15; The Eaton Collection at the Archives of Ontario

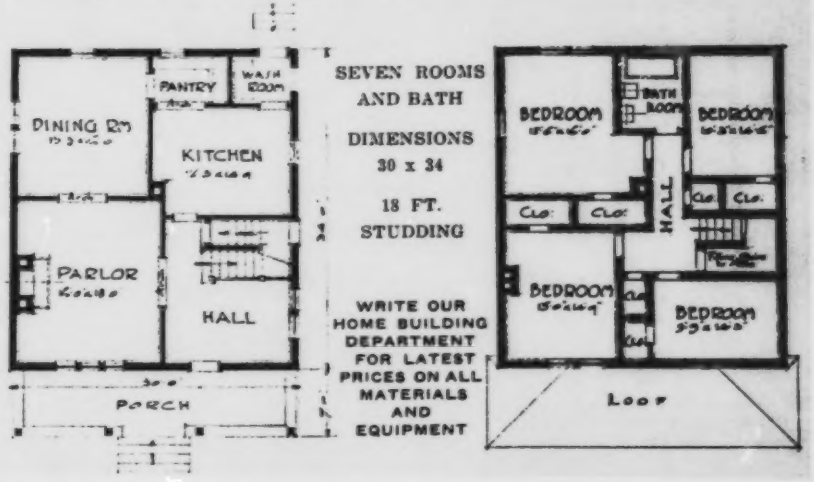


EASTBOURNE

EATON PLAN BOOK

E15

An exceptionally well planned home of the modern type of square house, which is the one type where you obtain the maximum of space at the minimum of cost of both material and labor. The treatment of the lower walls with siding and the upper walls with shingles produces a pleasing and well balanced effect.



154 An Eaton's plan for a square house, the Eastbourne, 30 feet by 34 feet, "an exceptionally well planned home of the modern type of square house."

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 13; The Eaton Collection at the Archives of Ontario

155

156

155 Eaton's square house at Radisson, Saskatchewan.
CIHB, 1976

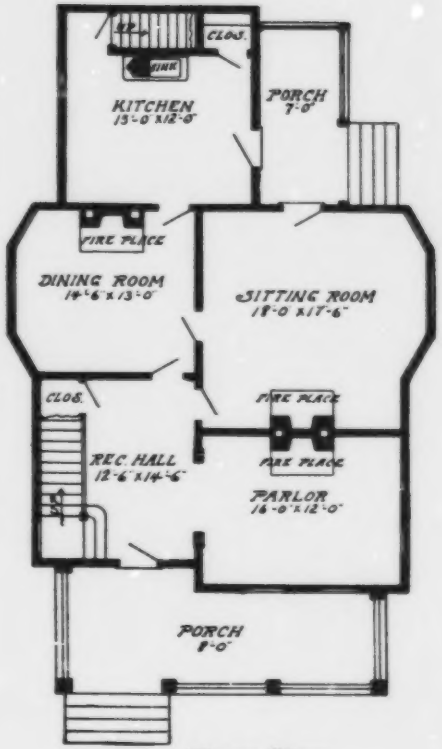
156 Eaton's square house at Riverton, Manitoba, built in 1920.
Manitoba Dept. of Culture, Heritage and Recreation, 1983

157

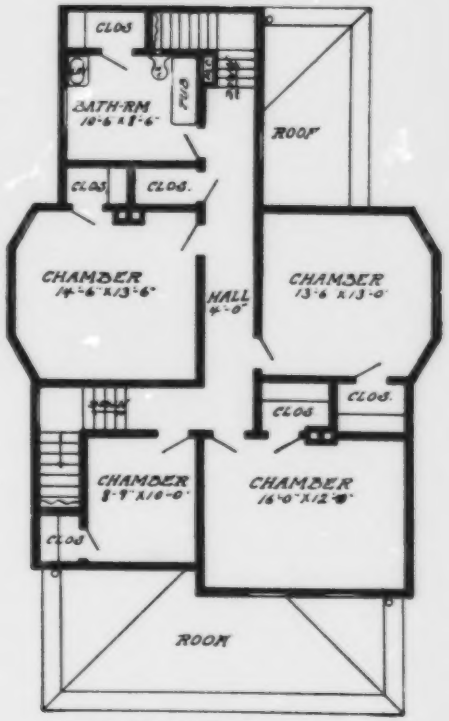
158

157 Eaton's square house at Hnausa, Manitoba, built ca. 1920.
Manitoba Dept. of Culture, Heritage and Recreation, 1983

158 The Green Point plan in F.T. Hodgson's *Low Cost American Homes* (Chicago: Frederick J. Drake, 1904). "Cost of this house is from $2,400 to $2,500, according to the locality in which it is built."



First Floor Plan

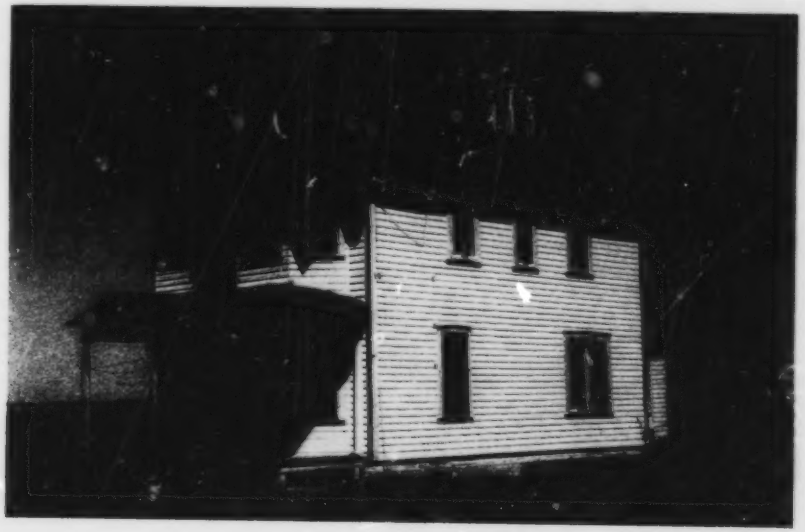


Second Floor Plan

159 Design No. 7036 in Radford's *Combined House and Barn Plan Book* (Chicago: Radford Architectural Co., 1908, p. 72). "Width, 34 feet; length, 47 feet, exclusive of porches."

160

161



162

160 Farmhouse at North Portal, Saskatchewan, built in 1905.
CIHB, 1976

161 Farmhouse at Pattee, Saskatchewan, built in 1908.
CIHB, 1974

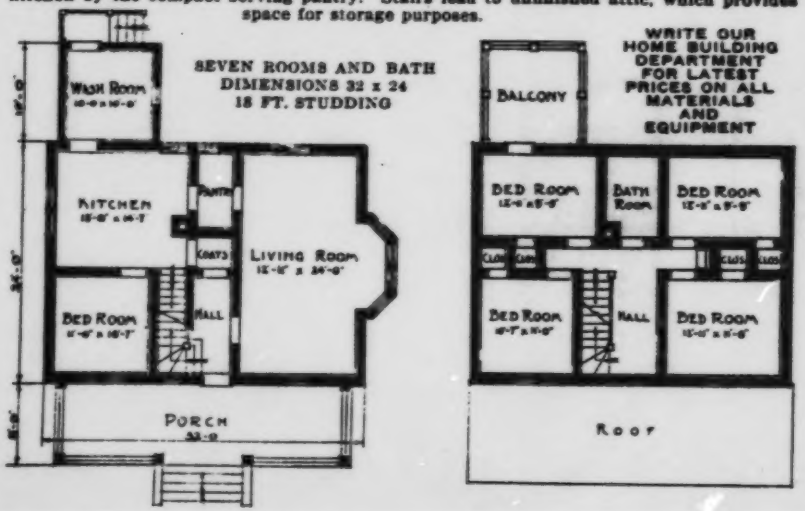
162 Square farmhouse with a gabled front bay at Richardson, Saskatchewan.
CIHB, 1974

EADGLEY

EATON PLAN BOOK

E25

There is little waste room to be found in this handy interior arrangement. The large, well lighted living and dining room is an attractive feature, divided as it is from the kitchen by the compact serving pantry. Stairs lead to unfinished attic, which provides space for storage purposes.



164 A well-preserved example of the Eadgley, erected at Riverton, Manitoba, in 1916. Minor variations from the catalogue illustration, such as the paired verandah columns, the railing design, and the decorative brackets on the gables, are not unusual; since Eaton's houses were not precut, purchasers could make alterations if they chose to.

Manitoba Dept. of Culture, Heritage and Recreation, 1983

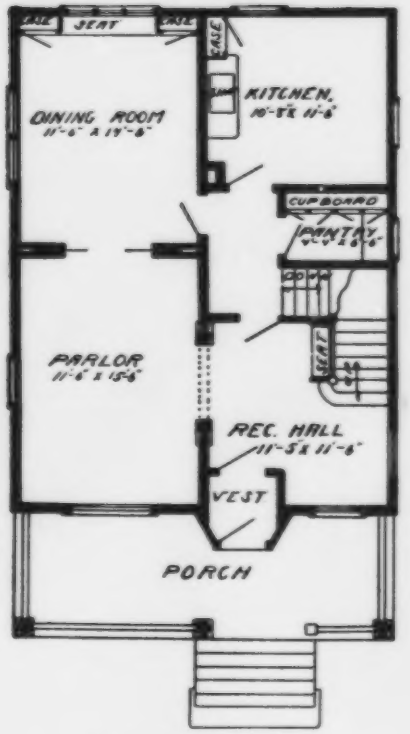
163 Eaton's Eadgley was among the firm's largest offerings, measuring 32 feet by 24 feet excluding the verandah and rear wing. Twin front gables gave a distinctive touch to what was basically an elongated version of the two-storey square plan.

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 23; The Eaton Collection at the Archives of Ontario

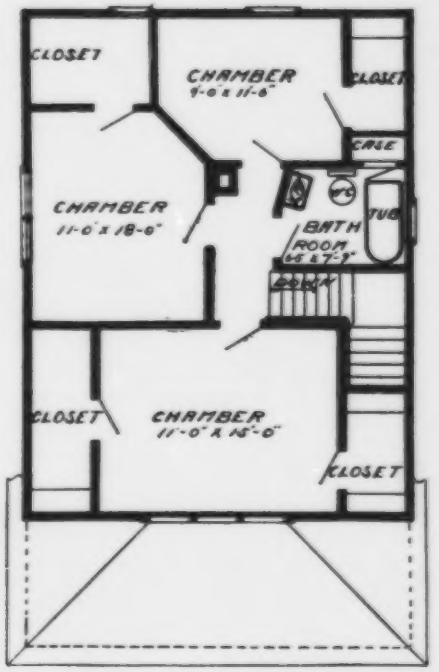
Gambrel-Roofed Houses

The considerable overlap and repetition in the designs offered in plan publications was clearly illustrated in the case of the cross-gable gambrel-roof plan that became popular in the West around 1904. A version of this layout began appearing in American plan books in that year, to be followed by a succession of variations during the following decade. It was quickly adopted by several Canadian firms, notably the B.C. Mills Timber and Trading Company, which produced a number of sectional prefab versions, and Eaton's, which added the plan to its mail-order house selection around 1912.

165 The Pontiac, a gambrel-roofed house plan featured in Hodgson's *Low Cost American Homes* (Chicago: Frederick J. Drake, 1904). Its cost ranged "from $3,200 to $3,400, according to the locality in which it is built."

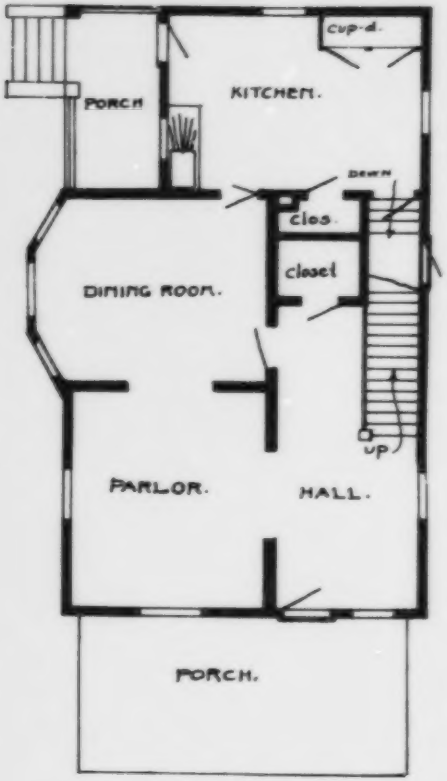


First Floor Plan



Second Floor Plan

166 Design No. 6088 in Radford's *Combined House and Barn Plan Book* (Chicago: Radford Architectural Co., 1908, [p. 59]). "Size: width 24 feet, 6 inches; length, 32 feet, exclusive of porches."

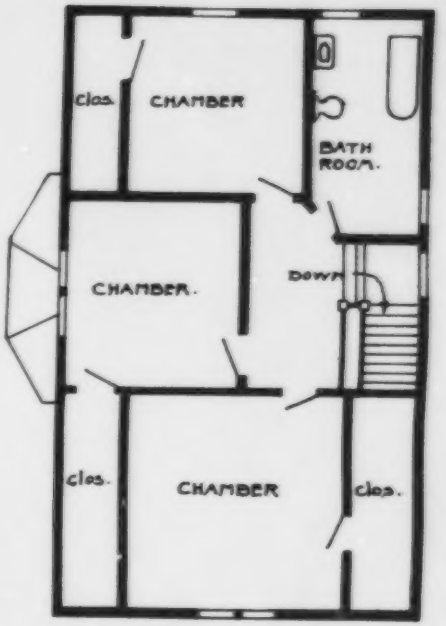


First Story Plan

Plan No. 16

The cottage shown is very roomy and is 24 ft. by 38 ft. with a 10 ft. front porch. The rooms are good size and convenient. The cellar way is under the front stairs with a grade door. Height of basement 7 ft. 6 in., first story 9 ft., second story 8 ft., no attic. Good plumbing, hot air furnace. Native stone wall, 4 in. siding, wood shingle roof. Finished in all yellow pine will cost about $3200.

Plans and specifications complete for $12.00. Bill of material $6.00.



Second Story Plan

167 Plan No. 16 in Dustman's *Book of Plans and Building Construction...* (Chicago: Charles C. Thompson, 1910, p. 95).

168

169

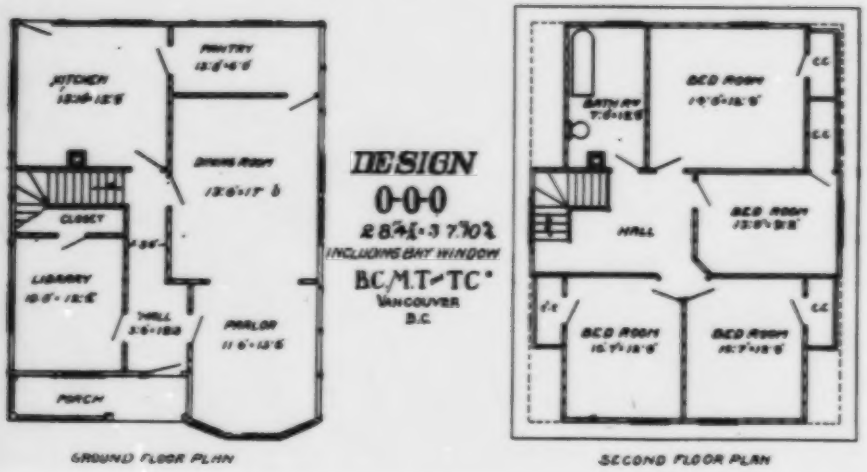
170

168 Gambrel-roofed farmhouse at Wellington, Alberta.
Photo by G.E. Mills, 1985

169 Gambrel-roofed house at Rosthern, Saskatchewan.
CIHB, 1974

170 Gambrel-roofed house at Prud'homme, Saskatchewan.
CIHB, 1974

172 B.C. Mills gambrel-roofed prefab, model 0-0-0, built in 1907 at Vonda, Saskatchewan.
CIHB, 1974



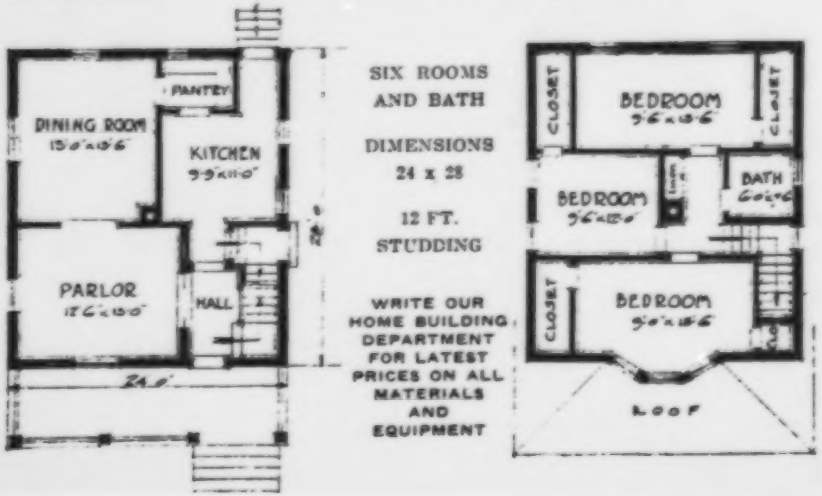
GROUND FLOOR PLAN

SECOND FLOOR PLAN

171 Prefabricated gambrel-roofed house, design 0-0-0 in the B.C. Mills *Catalogue of Patented Ready-Made Houses* (Vancouver: 1905, n.p.).
Vancouver City Archives

EARLSFIELD
EATON PLAN BOOK
E35

Here is one of the best little house designs. With its large veranda, bay window in front room of second floor, and gambrel roof, it certainly presents a most pleasing appearance and at the same time well and conveniently arranged. It has front and rear entrance and a grade door by which either basement or first story may be entered. Although only a story and a half high, the gambrel roof makes bedroom walls square with the ceilings.



173 "Here is one of the best little house designs": Eaton's Earlsfield plan for a 24-foot-by-28-foot dwelling. This popular design appeared in Eaton's catalogues from 1912 onwards.

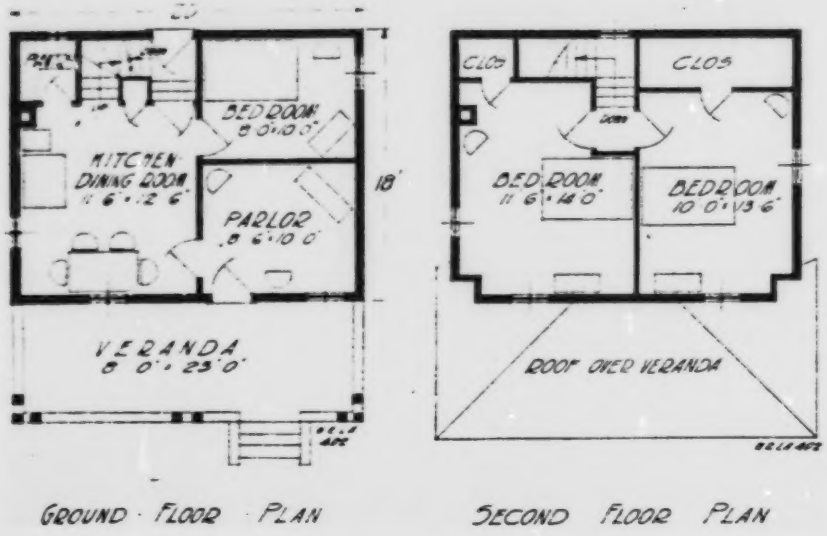
T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 33; The Eaton Collection at the Archives of Ontario

174 An Earlsfield model built at Lancer, Saskatchewan, in 1917.
CIHB, 1972

175 An Eaton's Earlsfield house at Birch River, Manitoba.
CIHB, 1976

176 An Eaton's Earlsfield house built by the John Atsinger family at Blackfalds, Alberta. The photograph was taken shortly after the house's completion in 1914. The house and an adjacent Eaton's barn remain in largely unaltered condition in 1986.
Alberta Culture

178 A gambrel-roofed farmhouse, likely based on WRLA plan No. 402, at an unidentified location in Saskatchewan.
Saskatchewan Archives Board, Photograph No. R-A9088



GROUND FLOOR PLAN

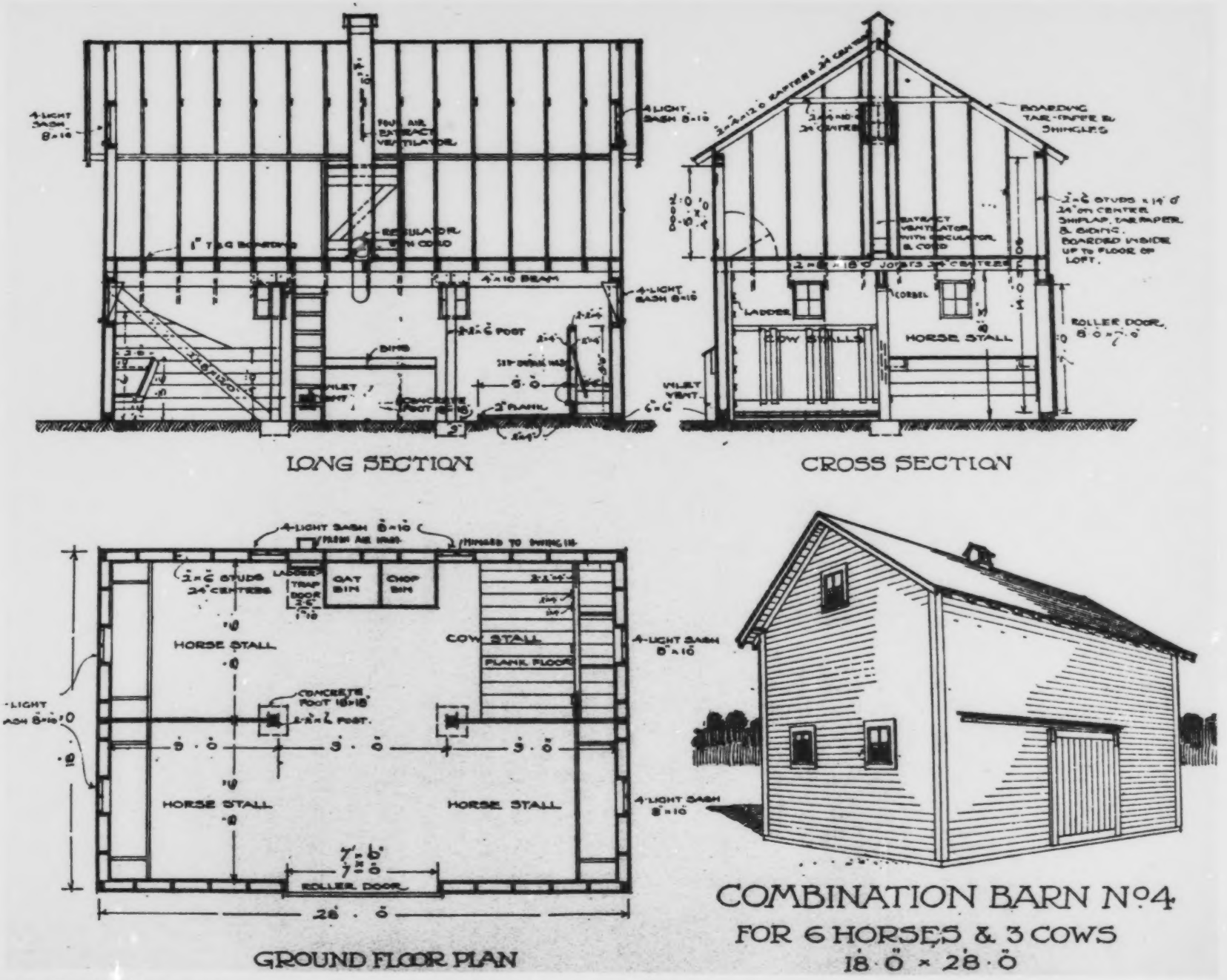
SECOND FLOOR PLAN

177 Farmhouse design No. 402 in the WRLA plan book. A description of this plan in "Farm House Plans" in the 5 May 1916 issue of *The Nor'-West Farmer* pointed out that "the gambrel type of roof with the well-designed dormer windows assures full head room for the up-stair bedrooms.... The rear entrance to a farm house can rightly be called the main entrance. That is the reason this house has such a conveniently arranged entrance on this side, giving access to the kitchen and basement on the ground level."
WRLA, *Plan Book of Houses and Farm Buildings for Western Canada* (Winnipeg: 1919), p. 14

Barns

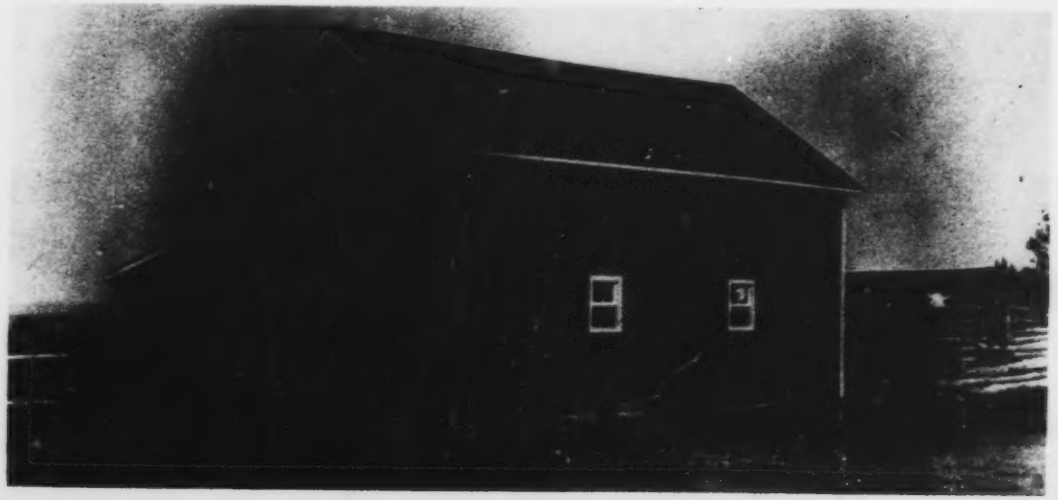
Gable-Roofed Barns

Gable-roof designs were usually recommended for small multiple-purpose barns, stables, and specialized barns in which the size of the loft was not a major consideration (a gambrel roof significantly increases a barn's capacity for hay storage). The Saskatchewan College of Agriculture's small gable-roofed combination barn was "intended to meet the requirements of a beginner who has only five or six work horses and two or three cows. It can later be extended at either end as necessary." Gable-roof barns readily accommodated shed-roofed additions on one or both sides, and many of the extant examples recorded by the CIHB had been enlarged in this manner.



179 "Combination Barn No. 4" in the B.C. Forest Service and Saskatchewan College of Agriculture pamphlet on general-purpose barns.

B.C. Dept. of Lands. Forest Service, *Combination or General Purpose Barns* (Victoria: William H. Cullin, King's Printer, 1915), p. 36



180 Stable built in 1917 near Baljennie, Saskatchewan.
Saskatchewan Archives Board, Photograph No. R-A3898

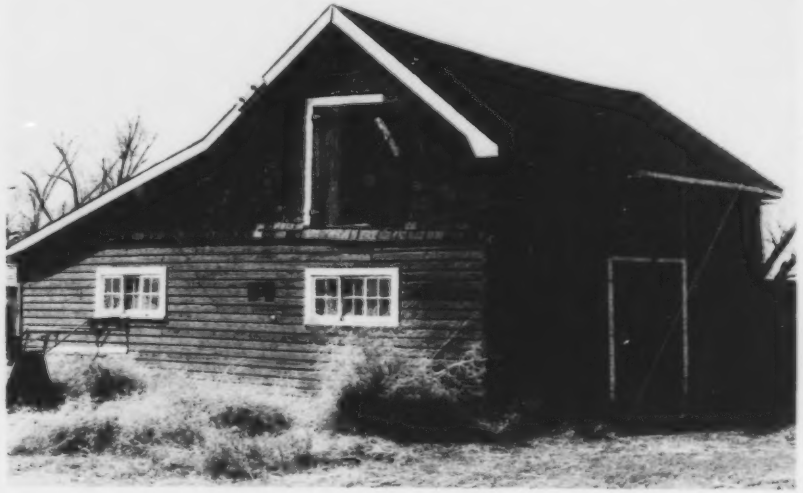
181 Stable or barn, Bluesky, Alberta.
CIHB, 1974

CPR Ready-Made Barns

The CPR offered a range of at least seven barn plans on its ready-made farms in the irrigation districts of southeastern and south-central Alberta. The most prevalent plan was for a rectangular gable-roofed barn measuring 16 feet by 28 feet with livestock and storage pens on the ground level and a loft above. This basic plan was also available in larger versions that featured lean-to extensions on one or both sides.[1]

The exteriors of CPR barns were sheathed with drop siding up to the top of the doors and with cedar shingles on the loft level, including the gable ends. This unusual treatment, presumably intended to match the exteriors of the firms ready-made houses, distinguishes them from other early barns in the region.

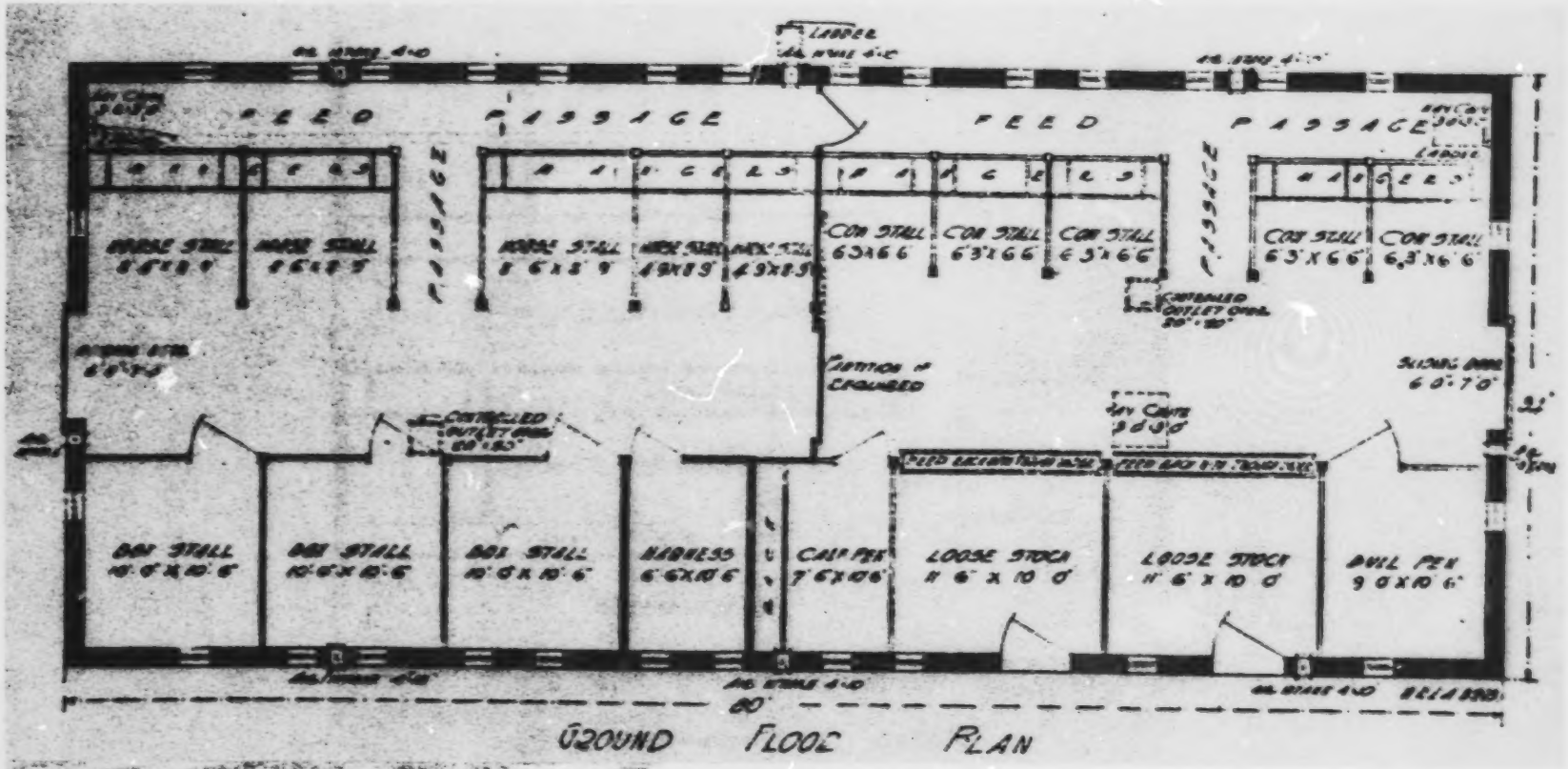
182 CPR ready-made barn No. 1 at Gem, Alberta, built ca. 1911–12.
CIHB, 1974

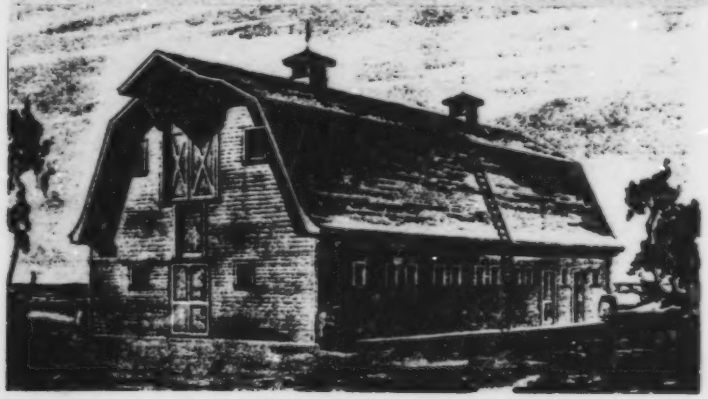


183 CPR ready-made barn No. 1 with extension, Gem, Alberta, ca. 1911–12.
CIHB, 1974

184 CPR ready-made barn No. 7, Gem, Alberta, built ca. 1911–12.
CIHB, 1974

185 CPR ready-made barn No. 7 at Kirkaldy, Alberta.
Photo by G.E. Mills, 1985





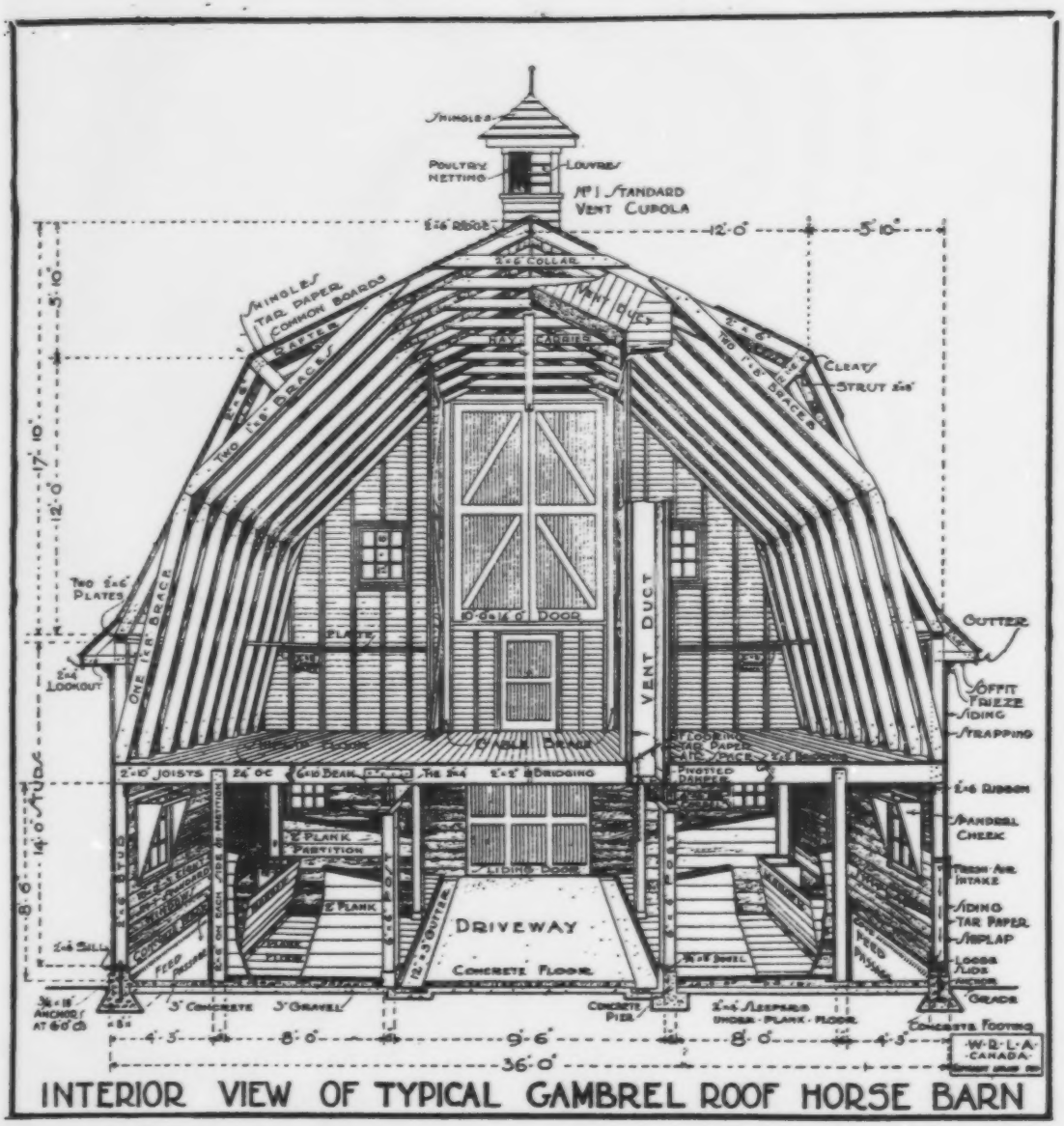
186 WRLA gambrel-roofed general-purpose barn, design B-203.
WRLA, *Plan Book of Houses and Farm Buildings for Western Canada* (Winnipeg: 1919), p. 41

Gambrel-Roofed Barns

Western farm journals were carrying plans for large gambrel-roofed barns — commonly termed hip-roofed barns — by the 1890s. These were usually Ontario or American designs, primarily intended for dairy farming, calling for stone basements or footings and heavy timber construction.[2] After 1900, balloon or platform framing quickly replaced timber framing, and poured concrete slabs replaced stone footings. A wide range of barn plans incorporating light frame construction were produced by agricultural colleges and commercial plan publishers (including some that dealt exclusively in barn designs) from about 1910 onwards. Specialized gambrel-roof plans intended for dairying, beef cattle, and horses were available, but the most popular seems to have been the general-purpose variety that accommodated horses and cattle. Such a barn usually employed a longitudinal plan that featured a central driveway running the length of the building, with stalls and pens on either side. Many of the designs dating from 1910 and later included a projecting peak that sheltered the slings used to lift hay into the loft (Figs. 186–187). Strong emphasis was placed on efficient drainage and ventilation systems in the later designs, and considerable debate waged over which system was most effective.[3]

A criticism of many barn plans offered on the Prairies before 1920 was that they were both too large and too expensive for half-section farmers. Such farmers' needs could be met, according to a June 1915 article in *The Farmer's Advocate*, by a barn measuring 38 feet by 50 feet, capable of accommodating 22 head of cattle and 8 horses.[4] Most surviving examples recorded in the CIHB survey appear to approximate these dimensions.

187 Eaton's gambrel-roofed horse barn, the Eaglebank.
T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 42; The Eaton Collection at the Archives of Ontario



188 Cross-section of a light-frame gambrel-roofed barn.
WRLA, *Plans for the Home Builder*. (Winnipeg: 1926), p. 64

189 A light-frame barn at Morden, Manitoba, 1916.
Manitoba Archives, Jessop Collection, 191

190

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192

190 Small gambrel-roofed general-purpose barn at Borden, Saskatchewan.
CIHB, 1976

191 Gambrel-roofed cattle barn at Onanole, Manitoba, built in 1913.
CIHB, 1974

192 Gambrel-roofed cattle barn built at Sherwood Park, Alberta, in 1914.
CIHB, 1974

193

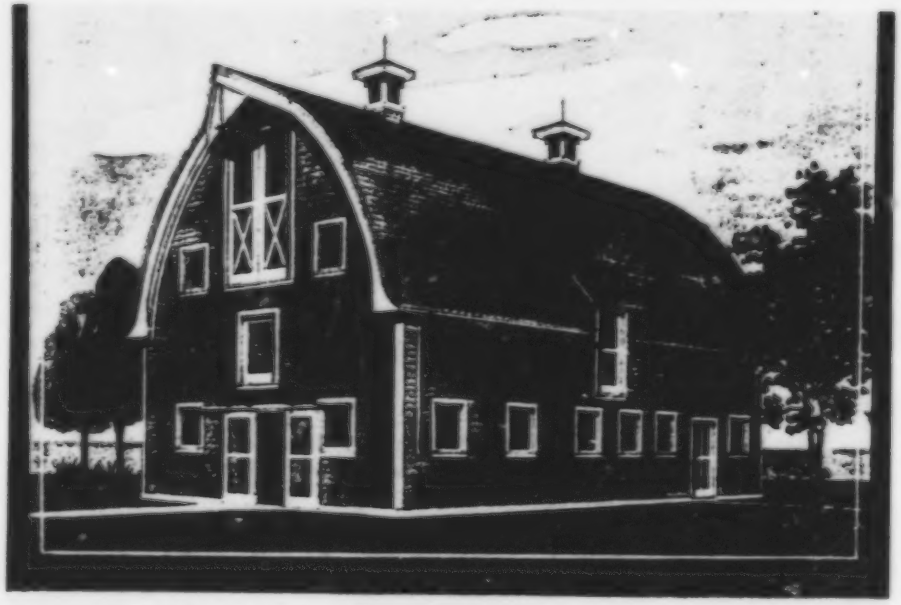
194

195

193 Gambrel-roofed general-purpose barn at Kathyrn, Alberta.
CIHB, 1974

194 Large gambrel-roofed stock barn at La Salle, Manitoba.
CIHB, 1974

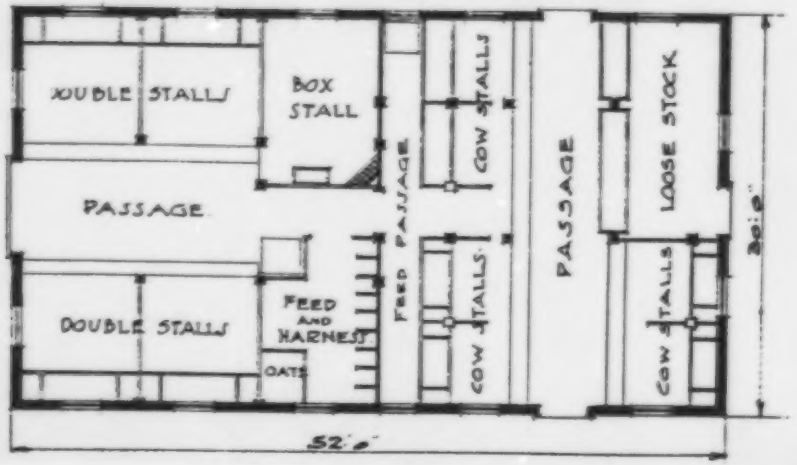
195 Large gambrel-roofed stock barn near Swift Current, Saskatchewan, built in 1916.
CIHB, 1972



EATONBANK

General Purpose Barn, planned for extension of horse stalls. Standard plans of the following sizes, all with 14 ft. studding. Rafters built up of four-ply 1x4 material.

E85—Size 30 x 44. Capacity, 16 cows and 5 horses.
E86—Size 30 x 48. Capacity, 16 cows and 7 horses.
E87—Size 30 x 52. Capacity, 16 cows and 9 horses.
E88—Size 30 x 56. Capacity, 16 cows and 11 horses.
E89—Size 30 x 60. Capacity, 16 cows and 13 horses.



196 The Eatonbank, an arch-roofed general-purpose barn Eaton's offered in 1919.

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 41; The Eaton Collection at the Archives of Ontario

Arch-Roofed Barns

The use of arch roofs on barns was promoted in post-1912 plan publications and farm journals, where they were frequently called Gothic-roofed barns. Major selling points were shorter wall studs, fewer braces, and greater structural strength than gambrel-roofed buildings.

> The great advantage of the Gothic roof is due to the fact that for a considerable portion of their height the rafters are nearly vertical, allowing the use of shorter wall studs than in a Gambrel-roofed barn to obtain the same loft capacity. This objective is still further attained owing to the fact that the braces from the loft joists to the wall studs may be omitted, as the height of the wall studs above the loft floor level is reduced.[5]

These advantages were offset by high construction costs and the unfamiliar process of laminating joists. Although they steadily gained in popularity, arch roofs remained less common than gambrel roofs on the Prairies before 1920.

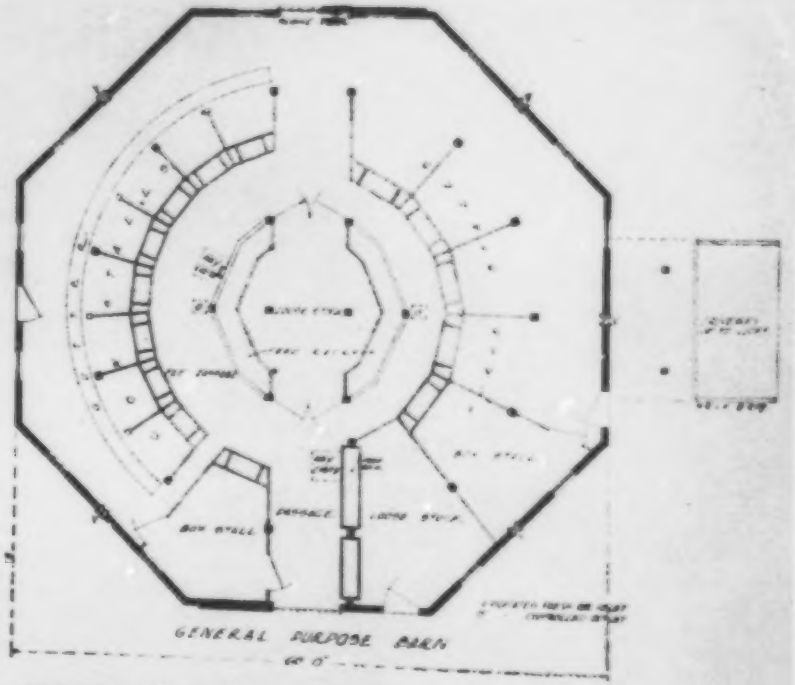
197 An arch-roofed barn at Basswood, Manitoba.
CIHB, 1974

198 An arch-roofed general-purpose barn at Cantuar, Saskatchewan.
CIHB, 1974

199 A large arch-roofed stock barn at St. Albert, Alberta.
CIHB, 1976

Octagonal and Round Barns

Octagonal and round barn designs were occasionally offered in plan books and described in farm journals, but found little acceptance among farmers, probably due as much to their unorthodox appearance as to the increased cost and difficulty of their construction.[6]



A general purpose barn, designed by the building department of the Western Retail Lumbermen's Association. This barn is an octagonal design, has more room and all the advantages of circular, yet easier to build, especially from the detailed working drawings. Easy driveway to loft, with room for storage of machinery, as well as grain and feed. Extra large loft door. Notice large centre loose stock pen and circular feed passage.

200 WRLA plan for an octagonal general-purpose barn.
Western Lumberman, Vol. 13, No. 9 (Sept. 1916), p. 16

201 A round barn, Portage Plains, Manitoba, built in 1916.
Manitoba Archives, Jessop Collection, 162

202 A round barn at Asquith, Saskatchewan.
CIHB, 1974

Granaries and Implement Sheds

Granaries

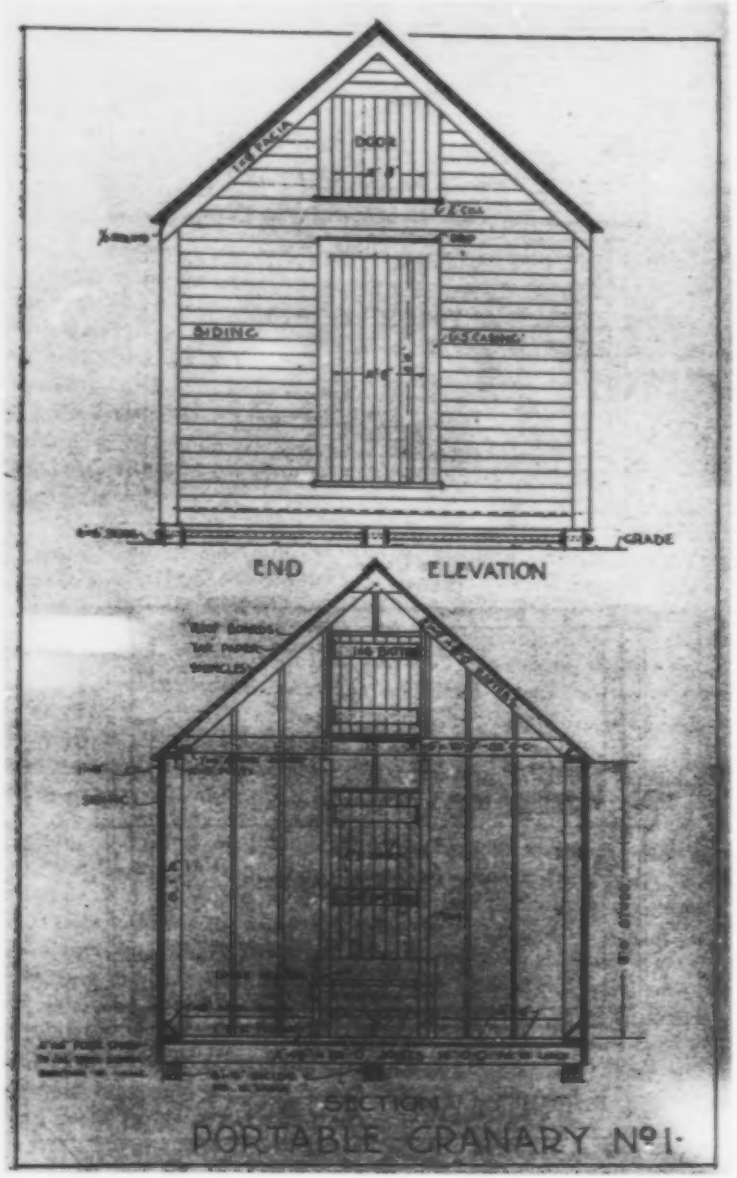
Farmers were urged to build substantial granaries to store their crop until it was transported to elevators. Wooden granaries came in two versions: small, portable structures that were mounted on skids and dragged to the fields to serve as temporary storage bins during threshing, and large, permanent ones that were capable of storing the entire annual harvest. Both types accounted for a large proportion of lumber sales after 1914.

Granaries had to be strong to withstand the pressure of the grain and weathertight to prevent spoilage. Two-by-six-inch studs were recommended for framing, as were a layer of shiplap or tongue-and-groove for the interior walls and floors, and a layer of dropsiding for the exterior. Extensive use of tie-rods or wire cables was also advised to combat the lateral pressure of the grain. Some farmers omitted the interior shiplap but reinforced the structure by adding to the exterior additional planks that anchored lateral wire trusses (Fig. 206). A small hatch in one of the gable-ends was used for filling the granary, and a full-height door at one end was used for emptying. Loose boards set on edge and slipped into grooves in the door jambs on the interior prevented the grain from pressing directly on the door. The boards could be removed as the grain was emptied.

The Saskatchewan College of Agriculture's plan for a portable granary measuring 12 feet by 14 feet with 8-foot side walls appears to have been typical — in terms of both design and size — of the smaller portable versions (Fig. 203).

Figure 208 illustrates a permanent granary measuring 22 feet by 30 feet and capable of holding 2500 bushels of grain in 11 separate bins. It was considered an appropriate size for a half-section farm. The bins opened onto a central floor space used for cleaning, weighing, and treating the grain. Some larger designs featured a centre aisle wide enough for a wagon, enabling the farmer to shovel his grain directly into the bins on each side rather than having to pitch it through the exterior hatches used on smaller models (Figs. 209–210). Despite these apparent advantages, many farmers opted for a collection of portable granaries rather than the larger stationary ones. There was a practical reason for this: small granaries could be easily moved from field to field according to the demands of fallowing and seeding.

During the 1930s the widespread use of portable augers eliminated days of manual labour filling and emptying granaries. It also led to design changes in the buildings themselves, the most conspicuous being a switch to roof hatches for filling and emptying. Many early granaries were adapted by simply installing new openings in their roofs (Fig. 211). Old farmhouses were also frequently put into service for grain storage after they had outlived their original use. First- and second-stage residences can still be seen on occasion, usually relocated along the perimeter of wheat fields, their walls reinforced and doors and windows boarded up.[1]



203 "Portable Granary No. 1.... The bevel boards prevent the grain from lodging between the studs and make it easy to clean the floor out."
B.C. Dept. of Lands. Forest Service, *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915), p. 22

204 Jessie and Clarence Umscheid roofing a new granary on their farm in the Milo area of Alberta. Date unknown.
Glenbow Archives, Calgary, NA-1367-99

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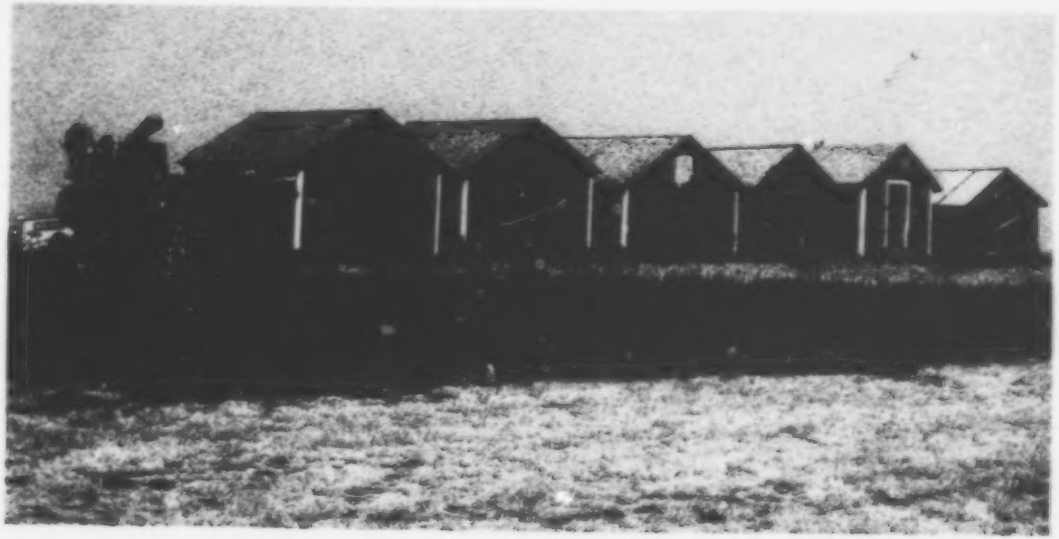

205 Portable granaries, Ste. Agathe, Manitoba.
CIHB, 1974

206 Portable granaries, Stonewall, Manitoba. The horizontal planks anchor internal wire trusses.
CIHB, 1974

207 A row of portable granaries near Hays, Alberta.
Photo by G.E. Mills, 1985

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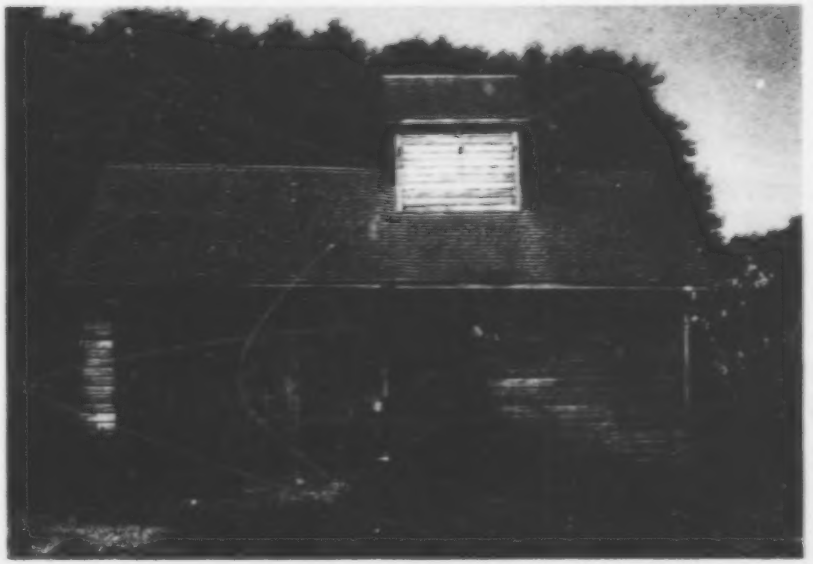


208 "Permanent Granary No. 3."
B.C. Dept. of Lands. Forest Service. *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915), p. 31

209 A larger, permanent, drive-through granary at Dalmeny, Saskatchewan.
CIHB, 1974

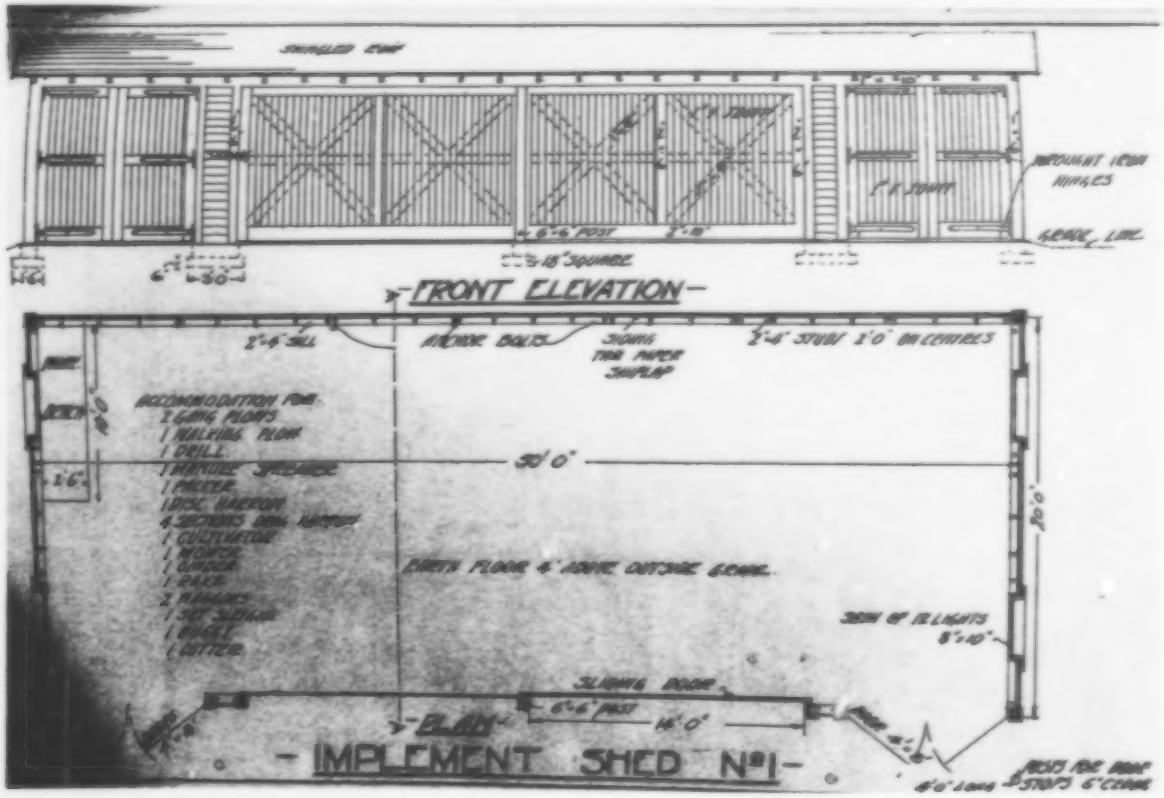
210 A former grain elevator at Morden, Manitoba. This type of granary accommodated a conveyor-belt system for removing grain from wagons and lifting it into a distribution box from which it could be redirected down into bins on either side of the central aisle.
CIHB, 1975

211 A large granary with double entrances and heavy horizontal braces, Kelsey, Alberta.
CHB, 1974

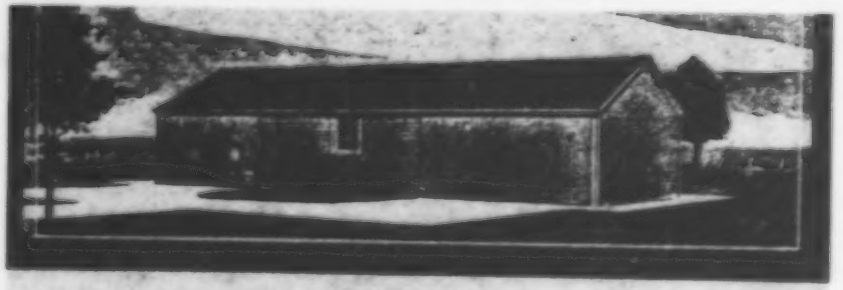
212 A former farmhouse converted into a granary near Saskatoon. Recycling old buildings for this purpose has remained a common practice on the Prairies.
Photo by G.E. Mills, 1986

Implement Sheds

In 1915, agricultural colleges, farming journals, and the lumber industry all launched campaigns urging farmers to build implement sheds. They warned that improperly stored and maintained machinery depreciated by at least ten per cent each year; the life expectancy of equipment such as binders and threshers could be doubled by storing them under cover. The sheds were designed to be inexpensive, since part of the rationale for building them was to free space in more costly barns for better use than storing equipment.[2] Shape and layout varied widely according to the types of machinery each farmer intended to store, which in many instances likely reduced the application of stock plans to general reference purposes.



213 "Implement Shed No. 1.... This shed, 50 ft. x 20 ft., is suitable for a half section or section farm."
B.C. Dept. of Lands. Forest Service, *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915), p. 9

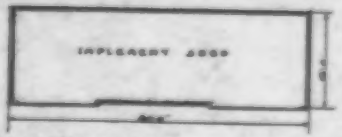


EASYBILT

EATON PLAN BOOK

E100

SIZE 16 x 50; 7 FT. STUDDING



USEFUL FARM BUILDINGS - - EASY TO ERECT

A Machine Shed that will hold all the machines that are found on the average farm. No farmer who wishes to be successful can afford to let his machines lay out in the weather.

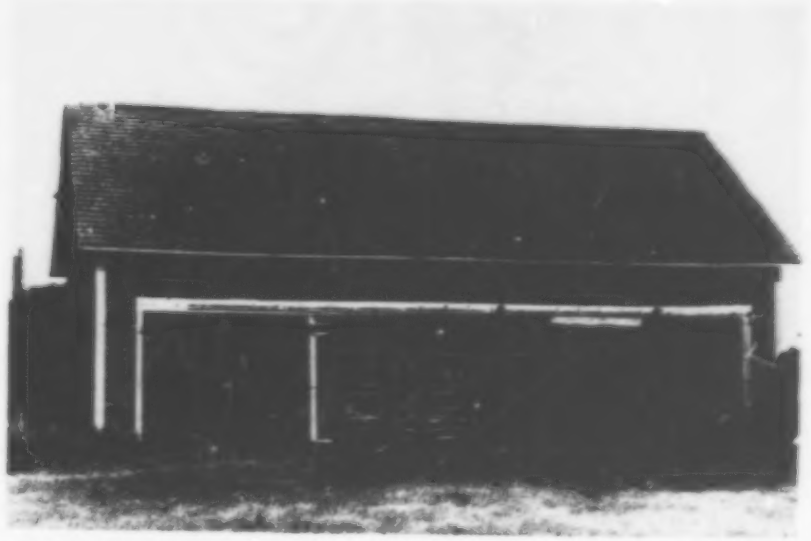
There is no part of a farmer's business that deserves more attention and care than the various kinds of machinery that is needed for successful farming. As a general rule the prosperity of the farmer may be estimated by the way he cares for his machinery. Poor care indicates shiftlessness, waste and the necessity of buying more machinery in a short time. Good care, on the other hand, indicates prosperity, development, bank deposits and long-lived machinery; hence the importance of having a shed where your machines can be safely stored when not in use and repaired in spare moments.

It is equally important that you should also have storehouses where your crops can be safely stored until the most favorable moment arrives for putting them on the market.

Every farmer who wishes to be successful should have these valuable buildings. We will provide you with plans that will enable any handy man to erect them. Get your neighbors to join you and buy a carload. We mark each order and load them separately in the car, so that there is no difficulty in sorting out material when it arrives.

214 Eaton's Easybilt implement shed.

T. Eaton Company, *Plan Book of Ideal Homes* (Winnipeg: 1919), p. 44; The Eaton Collection at the Archives of Ontario



215 Implement shed, Newdale, Manitoba. Different door sizes indicate the different types of machinery that the building was intended to house.

CIHB, 1974

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216 Implement shed, Kenville, Manitoba.
CIHB, 1976

217 Implement shed, Newdale, Manitoba.
CIHB, 1975

218 Implement shed, La Salle, Manitoba.
CIHB, 1974

Appendix A
Census Data on Prairie Farm Buildings

Table 1
Number of Occupied Farms, 1901, 1911, 1921

	1901	1911	1921
Manitoba	32 252	43 631	53 252
Saskatchewan	13 445	95 013	119 451
Alberta	9 479	60 559	83 954

Source: Canada. Dept. of Trade and Commerce. Dominion Bureau of Statistics, *Sixth Census of Canada, 1921* (Ottawa: F.A. Acland, King's Printer, 1924–29), Vol. 5, Tables 2, 18.

Table 2
Wooden Houses as Proportion of Provincial Totals, 1901, 1911, 1921

	1901	1911	1921
Manitoba			
Total houses	49 784	85 720	117 541
Wooden houses	43 287	76 758	108 667
Percentage, wooden houses	86.95%	89.55%	92.45%
Saskatchewan			
Total houses	17 645	118 283	163 661
Wooden houses	12 683	112 139	156 156
Percentage, wooden houses	71.88%	94.81%	95.41%
Alberta			
Total houses	14 842	87 672	136 125
Wooden houses	10 587	84 345	130 686
Percentage, wooden houses	71.33%	96.21%	96.00%

Source: Canada. Dept. of Trade and Commerce. Dominion Bureau of Statistics, *Sixth Census of Canada, 1921* (Ottawa: F.A. Acland, King's Printer, 1924–29), Vol. 3, Tables 5, 6.

Table 3
Rural Housing by Main Structural Material, 1921

	Total	Wood	Brick	Stone	Concrete	Other*
Manitoba	70 558	67 314	1455	238	312	1239
Saskatchewan	116 904	113 636	603	314	87	2264
Alberta	87 401	85 390	424	43	111	1433

* Sod and clay likely accounted for the majority of "other" materials.

Source: Canada. Dept. of Trade and Commerce. Dominion Bureau of Statistics, *Sixth Census of Canada, 1921* (Ottawa: F.A. Acland, King's Printer, 1924–29), Vol. 3, Tables 5, 6.

Table 4
Value of Farm Buildings, 1901, 1911, 1921

	1901	1911	1921
Manitoba			
Total value all farm buildings	$20 049 726	$62 607 036	$113 005 195
Average value of buildings per farm	$622	$1435	$2122
% of total farm value	13.25%	13.51%	17.37%
Saskatchewan			
Total value all farm buildings	$5 178 127	$76 156 050	$216 398 082
Average value of buildings per farm	$385	$802	$1812
% of total farm value	11.65%	9.14%	13.11%
Alberta			
Total value all farm buildings	$5 002 417	$29 479 522	$121 765 499
Average value of buildings per farm	$379	$671	$1468
% of total farm value	10.34%	8.25%	12.58%
Canadian average			
% of total farm value	22.15%	19.47%	20.99%

Source: Canada. Dept. of Trade and Commerce. Dominion Bureau of Statistics, *Sixth Census of Canada, 1921* (Ottawa: F.A. Acland, King's Printer, 1924–29), Vol. 5, Tables 2, 5, 6, 18.

Table 5
Approximate Quantities of Lumber Shipped by Rail to Manitoba, Saskatchewan, and Alberta in Peak Settlement Years (Millions of Board Feet)

	1910	1911	1912	1913	1914	1915	1916
B.C. Coast	263	344	471	421	338	438	630
B.C. Interior	377	420	440	335	210	155	260
Alberta & Saskatchewan (spruce)*	120	97	204	191	135	140	125
Western Ontario (pine)*	200	120	200	150	100	100	–
American Imports**	114	263	300	138	79	15	15

* Estimated totals.
** Total imports into all four western provinces.

Sources: Vancouver (B.C.). Board of Trade, *Annual Report...* (Vancouver: News-Advertiser, 1912–16), Vols. 27–32.

Appendix B
Wooden Farmhouses and Barns Recorded on the Prairies by the Canadian Inventory of Historic Building and Grouped by Storeys and Roof Shapes

Table 1
Wood-Frame Farmhouses
Grouped by Storeys and Roof Shapes

	Man.	Sask.	Alta.	Total
One Storey				
Gable roof	146	370	485	1001
Hipped-gable roof	5	4	6	15
Hip roof (including pyramidal and truncated hip)	43	212	252	507
Gambrel roof	1	2	–	3
Shed roof	4	29	32	65
Total	199	617	775	1591
One-and-One-Half Storey				
Gable roof	450	1008	669	2127
Hipped-gable roof	30	17	17	64
Hip roof (including pyramidal and truncated hip)	76	276	101	453
Gambrel roof	19	42	27	88
Shed roof	2	3	3	8
Total	577	1346	817	2740
Two Storey				
Gable roof	156	94	131	381
Hipped-gable roof	4	5	1	10
Hip roof (including pyramidal and truncated hip)	79	165	61	305
Gambrel roof	4	5	8	17
Shed roof	–	6	1	7
Total	243	275	215	720
Two-and-One-Half Storey				
Gable roof	10	19	13	42
Hipped-gable roof	1	–	1	2
Hip roof (including pyramidal and truncated hip)	50	64	11	125
Total	61	83	25	169
Totals by province	1080	2321	1819	5220

Table 2
Wood-Frame Barns
Grouped by Roof Shapes

	Man.	Sask.	Alta.	Total
Gable roof	207	105	229	541
Gambrel roof	100	129	172	401
Gothic-arch roof	3	3	1	7
Polygonal roof	–	1	4	5
Hip roof	2	2	–	4
Totals by province	312	240	406	958

Appendix C
Major Lineyard Firms in Western Canada in 1914

Firm and Head Office Location	Number of Lineyards			
	Man.	Sask.	Alta.	Total
Beaver Lumber Co. Winnipeg	7	64	2	73
Monarch Lumber Co. Winnipeg	18	35	–	53
Crown Lumber Co.* Calgary	–	–	52	52
Security Lumber Co.* Moose Jaw	–	43	–	43
Lumber Mfrs. Yards Ltd.* Regina	–	37	–	37
Rogers Lumber Yards Ltd. Minneapolis/Moose Jaw	–	29	–	29
Reliance Lumber Co. Minneapolis/Saskatoon	–	26	3	29
Atlas Lumber Co.** Calgary	–	6	19	25
Rat Portage Lumber Co. Winnipeg	12	7	–	19
Citizen's Lumber Co. Lethbridge	–	1	16	17
Pioneer Lumber Co. Minneapolis/Lethbridge	–	–	12	12
Revelstoke Sawmills Co.** Calgary	–	9	2	11
Globe Lumber Co.** Calgary	–	–	11	11
Corona Lumber Co. Minneapolis/Portage-La-Prairie	8	1	–	9
Major lineyard total	45	258	117	420
Total retail outlets	301	728	397	1426

* Subsidiary of Western Canada Lumber Co.
** Subsidiary of Revelstoke Sawmill Co.

Source: *Dominion of Canada and Newfoundland Gazetteer and Classified Business Directory, 1914* (Toronto: Canada Gazetteer Publishing, 1914.)

Endnotes

Part I
The Prairie Lumber Trade

The Lumber Trade Organizes

1 Descriptions of the early lumber trade on the Prairies can be found in "Lumbering in Manitoba," *Manitoba Colonist*, Vol. 3, No. 9 (Feb. 1889), p. 371; "The Pioneers of the Prairie Trade," *Western Lumberman*, Vol. 8, No. 3 (March 1911), p. 26; "The First Prairie Sawmill," *Western Lumberman*, Vol. 7, No. 1 (Jan. 1910), p. 26; Charles McIntyre, "Forestry and Lumber," in Henry J. Boam, comp., *The Prcirie Provinces of Canada...*, ed. Ashley G. Brown (London: Sells, 1914) (hereafter cited as "Forestry and Lumber"), pp. 373–77.

2 "The Lumber Industry," *The Nor'-West Farmer*, Sept. 1902, p. 828.

3 The early trading links between Winnipeg and St. Paul are described in Donald Kerr, "Wholesale Trade on the Canadian Plains in the Late 19th Century: Winnipeg and Its Competition," in Howard Palmer, ed., *The Settlement of the West* (Calgary: Univ. of Calgary Press, 1977), pp. 131–46.

4 "Lumbering in the West," *The Commercial*, 9 Feb. 1891, p. 533.

5 "Lumber and Fuel Used in Manitoba," *The Farmer's Advocate and Home Journal*, Vol. 36, No. 536 (21 Oct. 1901), p. 634; *also* "The Lumber Industry," *The Nor'-West Farmer*, Sept. 1902, p. 828.

6 Joseph Collins Lawrence, "Markets and Capital: A History of the Lumber Industry of British Columbia, 1778–1952," MA thesis, Univ. of British Columbia, Vancouver, 1957 (hereafter cited as "Markets and Capital"), p. 99.

7 H.D. Langille, "Canadian Lumber Competition," *American Forestry*, Vol. 21 (Feb. 1915) (hereafter cited as "Canadian Lumber Competition"), p. 137.

8 Lawrence, "Markets and Capital," pp. 41–43, 85–86.

9 "Lumbering in the West," *The Commercial*, 9 Feb. 1891, p. 533.

10 "Lumbering in Western Canada," *The Commercial*, Annual Supp., 15 Feb. 1896, n.p.

11 "The Lumber Industry," *The Nor'-West Farmer*, Sept. 1902, p. 828.

12 "Rat Portage Lumber Company," *The Commercial*, 19 March 1898, p. 723; *also* "A Great Lumbering Concern of the West," *Western Lumberman*, Vol. 8, No. 9 (Sept. 1911), pp. 38–39.

13 "Winnipeg Markets," *The Commercial*, 17 Sept. 1894, p. 11.

14 "Lumber and Fuel Used in Manitoba," *The Farmer's Advocate and Home Journal*, Vol. 36, No. 536 (21 Oct. 1901), p. 634.

15 "The Lumber Trade," *The Nor'-West Farmer*, Sept. 1902, p. 828. In 1902 B.C. mills shipped 20 million board feet of lumber to Manitoba; this accounted for approximately 1/8 of the total lumber sales in Manitoba for that year.

16 Langille, "Canadian Lumber Competition," p. 137. These figures are approximations based on lumber shipments.

17 British Columbia. Legislative Assembly, "Report of the Minister of Lands," in *Sessional Papers, 1914* (Victoria: King's Printer, 1915), p. D57. *See also* Vancouver (B.C.) Board of Trade, *Annual Report, 1914–15* (Vancouver: *News-Advertiser*, 1915), p. 34. Statistics on B.C.'s lumber production before 1920 vary in these two sources. The ministry report claims a total production of 1 515 828 000 board feet for the year, with 80 per cent shipped to the Prairies; the Board of Trade figures suggest a somewhat smaller output, of which the Prairies absorbed about 70 per cent.

18 "Winnipeg Wholesale Trade," *The Commercial*, 16 July 1888, p. 1093. This publication carried regular price lists for wholesale commodities available in the city.

19 "Winnipeg Lumber Prices," *The Commercial*, 26 Feb. 1898, p. 661.

20 "Standardization of Finished Sizes in Lumber," *Western Lumberman*, Vol. 8, No. 7 (July 1911), p. 80.

21 British Columbia Lumber and Shingle Manufacturers' Association, *Sash and Door List* (Vancouver: 1906). The association was formed during the early 1900s, but did not become an effective regulatory agency for the coastal industry until about 1909.

22 "Standardization of Finished Sizes in Lumber," *Western Lumberman*, Vol. 8, No. 7 (July 1911), p. 80.

23 Manitoba. Provincial Archives, MG 14, B45, Valentine Winkler, Lumber sales books, 1885–99, abstract of lumber orders for 1887.

24 Coincidently, the Mississippi Valley Lumbermen's Association was established in Minnesota in the same year as the WRLA was launched in western Canada. *See* John H. Cox, "Trade Associations in the Lumber Industry of the Pacific Northwest, 1899–1914," *Pacific Northwest Quarterly*, Vol. 41, No. 4 (Oct. 1950), pp. 285–86.

25 "The Lumber Combine," *The Nor'-West Farmer*, 5 March 1903, p. 242.

26 "The Lumbermen Meet," *The Commercial*, 19 Feb. 1894, p. 537.

27 "WRLA Annual Meeting," *The Commercial*, 24 Feb. 1900, p. 781.

28 Canada. Parliament. House of Commons, *Journals of the House of Commons*, 3rd Session, 10th Parliament, 1906–07, Vol. 42, Part 2, "Proceedings of the Select Committee Appointed for the Purpose of Inquiring into the Prices Charged for Lumber in the Provinces of Manitoba, Alberta and Saskatchewan" (hereafter cited as CPJ, "Prices Charged for Lumber"), p. 435.

29 "Western Lumbermen in Session," *The Commercial*, 4 April 1903, p. 726. The WRLA's success attracted the attention of lumbermen in eastern Canada. The January 1897 issue of *The Canada Lumberman* noted that "the only association which can fairly be said to be in active operation is the Western Retail Lumbermen's Association of Manitoba. Nearly every retail dealer of the Northwest has his name enrolled on the membership list, which also includes the manufacturers as honorary

members...," *in* "Suggestions for Improvement," *The Canada Lumberman*, Vol. 18, No. 1 (Jan. 1897), p. 8.
30 Lawrence, "Markets and Capital," p. 98.
31 "The Lumber Question," *The Nor'-West Farmer*, 20 Nov. 1903, p. 1186. *See also*, for example, *The Phoenix* (Saskatoon), 17 April 1903, p. 7; 20 Jan. 1905, p. 6.
32 *Manitoba Free Press*, 8 Jan. 1904, p. 1.
33 "Correspondence," *British Columbia Lumberman*, Vol. 1, No. 3 (March 1904), p. 3.
34 "Threatened Competition of the Lumber Industry By the C.P.R.," *British Columbia Lumberman*, Vol. 1, No. 1 (Jan. 1904), p. 22.
35 "Annual Report," *British Columbia Lumberman*, Vol. 1, No. 3 (March 1904), p. 13.
36 CPJ, "Prices Charged for Lumber," p. 287.
37 Ibid., "Orders of Reference," p. xxvi.

Growth and Speculation: Selling Lumber during the Settlement Boom

1 CPJ, "Prices Charged for Lumber," pp. 624–25.
2 "Western Lumbermen Met in Vancouver," *Western Lumberman*, Vol. 7, No. 1 (Jan. 1910), pp. 18–19.
3 Some of the business activities of Davidson and McRae are described in Chester Bailey Martin, *Dominion Lands Policy* (Toronto: MacMillan, 1938) (hereafter cited as *Dominion Lands Policy*), pp. 325–27; *see also* T.D. Regehr, *The Canadian Northern Railway: Pioneer Road of the Northern Prairie, 1895–1918* (Toronto: MacMillan, 1976), pp. 301–2.
4 Canadian Western Lumber Company Ltd., *Directors' Reports and Balance Sheets, December 31, 1911* (London: Waterlow and Sons, 1912).
5 McIntyre, "Forestry and Lumber," p. 374.
6 The complex growth of the Canadian Western Lumber Company's retail network is described in the following sources held by the Glenbow Museum Archives, Add. Mss. 5837, "History of the Security Lumber Company," n.d., typescript, and Add. Mss. M3812, Harry F. Chritchley et al., "Developing the Prairie Towns," 1965, typescript. This latter document provides historical sketches of various lineyard firms that were either established or absorbed by the Canadian Western Lumber Company.
7 Glenbow Museum (Calgary). Archives, Add. Mss. M3812, Harry Chritchley et al., "Developing the Prairie Towns," 1965, typescript; *also Farm and Ranch Review*, Feb. 1909, pp. 72–73; "The Lumber Selling Centres of the Prairies," *Western Lumberman*, Vol. 9, No. 8 (Aug. 1912), p. 43.
8 *See* Lawrence, "Markets and Capital," pp. 47–51.
9 "The Lumber Selling Centres of the Prairies," *Western Lumberman*, Vol. 9, No. 8 (Aug. 1912), p. 39.
10 Ibid., p. 41.
11 *Henderson's 1912 Winnipeg Directory* (Winnipeg: Henderson's Directories, 1912), pp. 1675–76.
12 "The Lumber Selling Centres of the Prairies," *Western Lumberman*, Vol. 9, No. 8 (Aug. 1912), p. 41.
13 Ibid., pp. 42–43.
14 "Edmonton — A Lumber City," *Western Lumberman*, Vol. 10, No. 5 (May 1913), p. 40.
15 Alberta. Provincial Archives, Acc. 72.312, Hayward Lumber Company records.
16 "Western Lumbermen Met in Vancouver," *Western Lumberman*, Vol. 7, No. 1 (Jan. 1910), p. 19. "It is estimated that the American family on the average brings with each of them $2,000 in goods, chattels, livestock and money, so next year's American immigration promises to transfer from the United States to Western Canada $50,000,000...."
17 Barry Broadfoot, *The Pioneer Years: 1895–1914*... (Toronto: Doubleday, 1976), pp. 274–75.
18 "Competition Gone Mad," *Western Lumberman*, Vol. 8, No. 12 (Dec. 1911), p. 24.
19 Western Retail Lumbermen's Association, *75 Years* (Calgary: J.D. Francis and Assoc., 1965), p. 3. This pamphlet commemorating the association's 75th anniversary is held by the head office of the WRLA in Winnipeg.
20 "Camp, Mill and Market in B.C.," *Western Lumberman*, Vol. 8, No. 9 (Sept. 1911), p. 31.
21 "The Lumber Market and the Harvest," *Western Lumberman*, Vol. 7, No. 8 (Aug. 1910), p. 18.
22 T.D. Regehr, "Bankers and Farmers in Western Canada, 1900–1939," in John C. Foster, ed., *The Developing West: Essays on Canadian History in Honor of Lewis H. Thomas* (Edmonton: Univ. of Alberta Press, 1983) (hereafter cited as "Bankers and Farmers"), pp. 316–25; *also*, Lyle Dick, "Estimates of Farm-Making Costs in Saskatchewan, 1882–1914," *Prairie Forum*, Vol. 6, No. 2 (1981), p. 186.
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24 "Financial Standing of Buyers," *Western Lumberman*, Vol. 10, No. 7 (July 1913), p. 42.
25 "The Banking Act and the Retail Lumber Dealer," *Western Lumberman*, Vol. 9, No. 12 (Dec. 1912), p. 46.
26 "The Western Retail Lumber Yard — The Location It Should Have, and How It Should be Conducted," *Western Lumberman*, Vol. 5, No. 4 (April 1908), p. 23.
27 "A Model Prairie Yard," *Western Lumberman*, Vol. 8, No. 8 (Aug. 1911), p. 49.
28 Advertisement for the McCollum Lumber Co. in *The Grain Growers' Guide*, May 1909, p. 12.
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32 Pedlar People Ltd. advertisement, *The Nor'-West Farmer*, 5 Feb. 1913, p. 192.
33 Canada Cement Co. advertisement, *The Nor'-West Farmer*, 21 April 1913, p. 570.
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35 *See* Paul Voisey, "Boosting the Small Prairie Town, 1904–1931: An Example from Southern Alberta," in Alan F.J. Artibise, ed. and intro., *Town and City: Aspects of Western Canadian Urban Development* (Regina: Canadian Plains Research Centre, Univ. of Regina, 1981), p. 162.

36 "Short Measure in Lumber," *The Nor'-West Farmer*, 5 March 1913, p. 308.
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Collapse and Resurgence: Responses to a Changing Market

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3 "Reorganization of Canadian Western Lumber Co. Ltd.," *Western Lumberman*, Vol. 11, No. 12 (Dec. 1914), p. 28.
4 Glenbow Museum (Calgary). Archives, Add. Mss. BB 1/C.556, Crown Lumber Company catalogue, n.d., n.p.
5 Canada. Commission of Conservation, *Rural Planning and Development; A Study of Rural Conditions and Problems in Canada, by Thomas Adams...* (Ottawa: 1917) (hereafter cited as *Rural Planning*), pp. 150–51.
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9 British Columbia. Provincial Archives, Add. Mss. GR 948, Box 1, File 1, British Columbia Forest Branch, Chief Forester's correspondence, 22 May 1919.
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11 "The Old and the New Way of Furnishing Bills for Construction," *Western Lumberman*, Vol. 17, No. 5 (May 1920), pp. 60–61.
12 "The Yardmen and the Silo...," *Western Lumberman*, Vol. 10, No. 5 (May 1913), p. 55.
13 Alberta. Provincial Archives, Add. Mss. 72.355, Citizen's Lumber Company, *Silo Bulletin No. 10* (Lethbridge: 1921).
14 "Now Is the Time to Boost the Value of Silos on the Farms," *Western Lumberman*, Vol. 12, No. 8 (Aug. 1915), p. 19.
15 Saskatchewan. Royal Commission on Immigration and Settlement, *Report ... 1930* (Regina: R.S. Garrett, King's Printer, 1930), pp. 94–95.
16 Untitled article, *Western Lumberman*, Vol. 14, No. 2 (Feb. 1917), p. 36.
17 "Farm Building Opportunities for Retailers," *Western Lumberman*, Vol. 13, No. 11 (Nov. 1916), p. 11.
18 J.H. Hamilton, ed., *ABC Lumber Trade Directory and Year Book*, 1917 ed. (Vancouver: Progress Publishing, 1917), pp. 104–5; *also* ibid., 1918 ed., pp. 110–11.
19 "Review of the Prairie Lumber Trade," *Western Lumberman*, Vol. 15, No. 6 (June 1918), p. 28.
20 "Keeping Tight Grip on Prairie Market," *Western Lumberman*, Vol. 16, No. 11 (Nov. 1919), p. 24; "Said the Retailer to the Manufacturer in B.C.," *Western Lumberman*, Vol. 17, No. 4 (April 1920), p. 54.
21 Martin, *Dominion Lands Policy*, p. 173.
22 Records for mail-order firms are not available before 1930. *See* George Edwin Britnell, *The Wheat Economy*, pref. H.A. Innis (Toronto: Univ. of Toronto Press, 1939) (hereafter cited as *The Wheat Economy*), pp. 25–29. The number of Winnipeg-based mail-order firms listed in city directories ranged between eight and ten in the years between 1916 and 1920.
23 *See*, for example, "Keeping Your Trade at Home," *Western Lumberman*, Vol. 18, No. 5 (May 1921), p. 40.
24 Western Retail Lumbermen's Association, *Directory of Retail Lumber Dealers of Alberta, Manitoba and Saskatchewan, January 1, 1920* (Winnipeg: 1920). Sixty lineyard firms were operational in that year.
25 "Annual Meeting, Western Retail Lumbermen's Association," *Western Lumberman*, Vol. 17, No. 2 (Feb. 1920), pp. 48–49.
26 James Gray, *The Roar of the Twenties* (Toronto: MacMillan, 1975) (hereafter cited as *The Roar of the Twenties*), pp. 50–51.
27 Canada. Dept. of Trade and Commerce. Dominion Bureau of Statistics, *Sixth Census of Canada, 1921* (Ottawa: F.A. Acland, King's Printer, 1925), Vol. 5, Table 2. The precise total was 255 657 farms in 1921.
28 Gray, *The Roar of the Twenties*, p. 52.

Part II
The Market for Wood and Buildings

The Need for Shelter

1 "That fabled architectural innovation of the treeless plains, the sod hut, never dominated the western landscape to the extent that legend suggests. As soon as they could get lumber, the pioneers happily deserted them. On frontiers opened by railways ... sod huts rarely appeared at all; nearly everyone built 'sawed huts' instead" *in* Paul Voisey, "Forging the Western Tradition: Approaches to Settlement and Agriculture in Southern Alberta Communities," PhD thesis, Univ. of Toronto, Toronto, 1983, p. 228; *also* Britnell, *The Wheat Economy*, p. 173: "Less than one per cent of prairie farm houses are of stone, brick, brick veneer or cement block construction. In many of the South, Eastern, and Central European communities ... buildings are fashioned upon the models of the country from which the settlers came, but there is a strong tendency for the thatched roof, log and clay or lumber and clay dwellings of the Ukrainians and the Russians to be replaced by a standardized Canadian house when the family fortunes will permit the transition."
2 *See*, for example, Carl A. Dawson and Eva R. Younge, *Pioneering in the Prairie Provinces: The Social Side of the Settlement Process* (Toronto: MacMillan, 1940), pp. 153–56; Florence M. Edwards, *Farm Living in the Prairie Provinces* (Ottawa: Dept. of Agriculture, 1947), pp. 6, 11, 17; James Arthur Munger, *Report on Housing and Environmental Conditions in the Prairie Provinces* (Saskatoon: Canadian Centre for Community Studies, 1966), pp. 9, 35, 67.
3 "Building the Country Home," *The Farmer's Advocate and Home Journal*, Vol. 43, No. 806 (4 March 1908), p. 329.
4 Thomas Ewing French and Frederick W. Ives, *Agricultural Drawing and The Design of Farm Structures* (New York: McGraw-Hill, 1915) (hereafter cited as *Agricultural Drawing*), pp. 50–55.

5 Kathleen M. Taggart, "The First Shelter of Early Pioneers," *Saskatchewan History*, Vol. 11, No. 3 (Autumn 1958) (hereafter cited as "The First Shelter"), pp. 88–89.

6 *See* Edward M. Ledohowski and David K. Butterfield, *Architectural Heritage: The Eastern Interlake Planning District* (Winnipeg: Manitoba Dept. of Cultural Affairs and Historic Resources, 1983), pp. 29–32, for a description of shed-roofed shanties in the Icelandic settlement area west of Lake Winnipeg. "Small frame lean-to's had become common additions to the log houses of the early 1890s, but within a short time larger versions of these earlier appendages were completed, replacing many of the original log structures."

7 This configuration recurs in farm journal articles after 1900. *See*, for example, "A Very Useful House for Beginners," *The Nor'West Farmer*, 20 May 1903, p. 512, and "House Plan Wanted," *The Farmer's Advocate and Home Journal*, Vol. 46, No. 11 (9 March 1910), p. 372. Its prevalence is affirmed by long-time Prairie residents: "Much has been written of sod houses, but in the Avondale-Logantown [Saskatchewan] area there were very few.... The majority of houses were lumber, one-and-a-half storeys high, one or two rooms and the same upstairs." Quoted from Women's Institute (Canada). Delisle Women's Institute. Book Committee, *Through the Years: Delisle, Donavon, Glenbow and O'Malley, Laura, Swanson* (Delisle, Sask.: Delisle Women's Institute, 1973), p. 74.

8 Terminology for milled lumber construction has been obtained from Theo Audel and Co., *Audel's Carpenters and Builders Guide No. 4* (New York: 1942), chapter 52. I thank Margaret Archibald, formerly with the Architectural History Branch, Canadian Parks Service, for the reference.

9 Willem de Gelder, *A Dutch Homesteader on the Prairies: The Letters of Willem de Gelder, 1910–13*, trans. and intro. Herman Ganzevoort (Toronto: Univ. of Toronto Press, 1973), p. 28.

10 "House Plan Wanted," *The Farmer's Advocate and Home Journal*, Vol. 46, No. 11 (9 March 1910), p. 372.

11 "In the Realm of the Retail Lumber Dealer...," *Western Lumberman*, Vol. 11, No. 9 (Sept. 1914), p. 64.

12 "Another Farm House," *The Nor'-West Farmer*, 5 May 1899, p. 296; "Description of John Campbell's First-Prize Farmhouse (from Our Ontario and Eastern Edition)," *The Farmer's Advocate and Home Journal*, Vol. 34, No. 490 (20 Nov. 1899), p. 594; "First Prize Farmhouse at Toronto Industrial Exhibition," *The Farmer's Advocate and Home Journal*, Vol. 35, No. 514 (20 Nov. 1900), p. 632.

13 "Basement Barns," *The Nor'-West Farmer*, Jan. 1895, p. 6; "Well Arranged Barn and Stables," *The Farmer's Advocate and Home Journal*, Vol. 30, No. 380 (20 April 1895), p. 155; "A.E. Muir's Barn at High Bluff," *The Farmer's Advocate and Home Journal*, Vol. 34, No. 475 (5 April 1899), p. 170.

14 "A Well-Planned Farmhouse," *The Farmer's Advocate and Home Journal*, Vol. 37, No. 546 (20 March 1902), p. 211. *See also* David K. Butterfield and Edward M. Ledohowski, *Architectural Heritage: The Brandon and Area Planning District* (Winnipeg: Manitoba Dept. of Cultural Affairs and Historic Resources, 1983), pp. 25–28.

15 R.W. Murchie et al., *Agricultural Progress on the Prairie Frontier* (Toronto: MacMillan, 1936), p. 8.

16 "House Plan For Saskatchewan Reader," *The Farmer's Advocate and Home Journal*, Vol. 42, No. 761 (24 April 1907), p. 608.

The Industry's Responses: Buildings by Rail

1 Margaretta Jean Darnall, "Innovations in American Prefabricated Housing, 1860–1890," *Journal of the Society of Architectural Historians*, Vol. 31, No. 1 (March 1972), pp. 51–55.

2 "A New Industry," *The Canada Lumberman*, Vol. 2, No. 9 (Sept. 1882), p. 268.

3 "A New Industry — The Importation of Ready-Made Houses," *Winnipeg Daily Times*, 4 July 1882, p. 1.

4 *The Canadian Patent Office Record*, Vol. 10, No. 6 (June 1882), pp. 177–78, Patent No. 14,733; illust., p. 194.

5 Canada. North-West Mounted Police, *Report of the Commissioner of the North-West Mounted Police Force, 1884* (Ottawa: MacLean, Roger & Co., 1885), p. 23.

6 Manitoba. Provincial Archives, Homes 14, *Keewatin Lumbering and Manufacturing Co.'s Portable Houses...*, no date.

7 The B.C. Mills, Timber and Trading Company's prefabs have been described at length in a previous Parks publication. *See* G.E. Mills and D.W. Holdsworth, "The B.C. Mills Prefabricated System: The Emergence of Ready-Made Buildings in Western Canada," *Canadian Historic Sites: Occasional Papers in Archaeology and History/Lieux historiques canadiens: Cahiers d'archéologie et d'histoire*, No. 14 (1975), pp. 127–69.

8 "Fine Weather Brings Great Crowd to Fair," *Winnipeg Telegram*, 2 Aug. 1904, p. 10.

9 Donald MacKay, *Empire of Wood: The MacMillan-Bloedel Story* (Vancouver: Douglas and McIntyre, 1982), p. 78.

10 "The Lumber Situation and Outlook," *Western Lumberman*, Vol. 6, No. 1 (June 1909), p. 15.

11 William Fream, "Canadian Agriculture: Part I — Prairie Farming," *The Journal of the Royal Agricultural Society of England*, 2nd ser., Vol. 21 (1885), p. 57.

12 Ibid., p. 53.

13 "Successful Colonies," *The Nor'-West Farmer and Manitoba Miller*, Sept. 1888, p. 243. The Churchbridge Colony was not the Church of England's only venture in ready-built housing. Around the turn of the century its missionary society funded construction of standard-plan churches and manses, called "Canterbury Cathedrals" and "Lambeth Palaces," throughout Saskatchewan. Fifty churches were constructed by 1908. The program is described in L.N. Tucker, *Western Canada* (London: A.R. Mowbray & Co., 1908), pp. 124–27.

14 "Successful Colonies," *The Nor'-West Farmer and Manitoba Miller*, Sept. 1888, p. 243.

15 Kent Stuart, "The Scottish Crofter Colony, Saltcoats, 1889–1904," *Saskatchewan History*, Vol. 24, No. 2 (Spring 1971), p. 45.

16 Quoted in Taggart, "The First Shelter," p. 88.

17 Frank Howard Schofield, *The Story of Manitoba* (Winnipeg: S.J. Clarke, 1913), Vol. 2, pp. 178–92; Manitoba. Provincial Archives. Photo Division, "Settlement," Nos. 275–90.

18 James Blaine Hedges, *Building the Canadian West; The Land and Colonization Policies of the Canadian Pacific Railway* (New York: MacMillan, 1939) (hereafter cited as *Building the Canadian West*), p. 224.

19 Canadian Pacific Railway Company (hereafter cited as CPR). Land Department, *Western Canada. Manitoba, Saskatchewan, Alberta: How to Obtain Lands, How to Make a Home* (Winnipeg: 1911), p. 51.

20 Glenbow Museum (Calgary). Archives, BN.C 212G, File 11, Canadian Pacific Railway Company, P.L. Naismith correspondence, 1913.
21 Ibid., File 9, 15 Jan. 1913.
22 Hedges, *Building the Canadian West*, p. 403.
23 Ibid., p. 282.
24 Ibid., pp. 242–43.
25 Ibid., p. 262.
26 Ibid., p. 316.
27 The Anzac, St. Julien, and Van Horne colonies were established specifically for Canadian veterans in 1916. The St. Julien colony contained 50 farms of 160 acres each; the other two contained 25 farms of 80 acres (Van Horne) and approximately 246 acres (Anzac). Acreage depended on irrigation: smaller tracts were provided in irrigated areas. *See* Hedges, *Building the Canadian West*, p. 404; *also* CPR. Dept. of Natural Resources, *Returned Veterans' Colonies...* (n.p.: 1916) (hereafter cited as *Returned Veterans' Colonies*).
28 Hedges, *Building the Canadian West*, pp. 403–4.
29 Ibid. The Hudson's Bay Company established its own colonization agency, the Hudson's Bay Company Overseas Settlement Ltd., during the mid-1920s and embarked on a recruitment campaign in England. *See* E.H. Gamble, "Canadian Farms for British Families," *The Beaver*, Outfit 259, No. 4 (March 1929), pp. 167–68; *also* E.H. Gamble, "HBC Farms at Vermilion," *The Beaver*, Outfit 262, No. 2 (Sept. 1931), pp. 276–77.
30 Hedges, *Building the Canadian West*, p. 405.
31 CPR. Colonization Department, *Settlers' Guide; A Handbook of Information for Settlers in the Canadian Pacific Railway Irrigation Block* (Calgary: 1911), p. 11.
32 CPR, *Returned Veterans' Colonies*, p. 9.
33 "Mail Order Competition," *Western Lumberman*, Vol. 7, No. 4 (April 1910), p. 28; "Manufacturers are Responsible," *Western Lumberman*, Vol. 7, No. 11 (Nov. 1910), p. 21.
34 Tim Snyder, "The Sears Pre-Cut: A Mail-Order House for Everyone," *Fine Homebuilding*, No. 28 (Aug.–Sept. 1985), pp. 42–45.
35 T. Eaton Co. advertisement, *The Grain Growers' Guide*, 5 Jan. 1910, p. 12.
36 T. Eaton Company, *T. Eaton Company Catalogue (No. 31), 1911–12* (Winnipeg: 1911), p. 259.
37 Ibid., *Modern Homes, Buildings and Materials Catalogue, 1914–15* (Winnipeg: 1914). This catalogue was subsequently expanded and published annually under various titles.
38 Ibid., *Farm, Buildings and Equipment — Soldiers' Land Settlement Scheme* (Winnipeg: 1919).
39 Ibid., *Building Supplies Catalogue, 1917–18* (Winnipeg: 1917), p. 6.
40 National Finance Co. advertisement, *The Grain Growers' Guide*, 2 Aug. 1911, p. 18.
41 Crown Realty Ltd. advertisement, *Saskatchewan Farmer and Grain Growers' Guide*, Vol. 1, No. 1 (Oct. 1910), p. 6.
42 Twentieth Century House Company, *Twentieth Century Mill-Cut Houses Ready for Erection...* (Vancouver: n.d.), p. 25.
43 Ibid., p. 1.
44 "Cut a Third off Your Building Bill," ad for Sovereign Construction Co., Toronto, in *The Nor'-West Farmer*, 6 July 1914, p. 751. In the previous year Sovereign had advertised a different line of ready-cut houses, which suggests that the firm's affiliation with Aladdin began in 1914.
45 Aladdin Homes advertisement, *The Saturday Evening Post*, Vol. 190, No. 1 (6 Jan. 1917), p. 103.
46 Canadian Aladdin Co. advertisements in *The Nor-'West Farmer*, 5 July 1920, p. 940, and *The Saskatchewan Farmer*, Vol. 16, No. 2 (Feb. 1925), p. 23.

Alternatives: Published Plans and Locally Bought Lumber

1 *See*, for example, "First Prize Farmhouse at Toronto Industrial Exhibition," *The Farmer's Advocate and Home Journal*, Vol. 35, No. 514 (20 Nov. 1900), p. 632; "Description of John Campbell's First-Prize Farmhouse (from Our Ontario and Eastern Edition)," *The Farmer's Advocate and Home Journal*, Vol. 34, No. 490 (20 Nov. 1899), p. 594.
2 "Houses — Barns — Stables in Manitoba," *The Nor'-West Farmer*, Sept. 1884, p. 176.
3 "Plans of Two Desirable Residences from Dustman's Book of Plans," *Western Lumberman*, Vol. 8, No. 2 (Feb. 1911), p. 37.
4 French and Ives, *Agricultural Drawing*, pp. 122–23, for a list of the brochures published in the United States.
5 Leslie J. Smith and Robert Milne, *Plans for Farm Buildings* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1913).
6 "Plans for Farm Buildings," *The Farmer's Advocate and Home Journal*, Vol. 48, No. 1090 (13 Aug. 1913), p. 1272.
7 Canada. Commission of Conservation, *Rural Planning*, p. 20.
8 British Columbia Dept. of Lands. Forest Service, *Combination or General Purpose Barns* (Victoria: William H. Cullin, King's Printer, 1915), p. 15.
9 Ibid., *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915), p. 8.
10 Ibid., *Farm Houses* (Victoria: William H. Cullin, King's Printer, 1916), pp. 7–11.
11 Ibid., *Combination or General Purpose Barns* (Victoria: William H. Cullin, King's Printer, 1915), p. 4.
12 British Columbia. Legislative Assembly, "Report of the Forest Branch," in *Sessional Papers, 1920* (Victoria: King's Printer, 1921), pp. H-5, H-6. The Saskatchewan Better Farming Trains are described in "Farm House Plans," *The Nor'-West Farmer*, 5 May 1916, p. 540.
13 Leslie John Smith, *Better Farm Homes (A Bulletin of House Plans)* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1917).
14 Ibid., p. 2.
15 Leslie John Smith, "Manitoba Better Farm Homes," The Agricultural Gazette of Canada, Vol. 4, No. 11 (Nov. 1917), pp. 970–71; "The Inglenook," *The Farmer's Advocate and Home Journal*, Vol. 52, No. 1296 (25 July 1917), p. 1082; "The Inglenook," *The Farmer's Advocate and Home Journal*, Vol. 53, No. 1319 (2 Jan. 1918), p. 28; "Better Rural Homes," *Western Lumberman*, Vol. 14, No. 9 (Sept. 1917), p. 21; "Better Rural Homes," *Western Lumberman*, Vol. 14, No. 12 (Dec. 1917), p. 27; "Better Rural Homes," *Western Lumberman*, Vol. 15, No. 1 (Jan. 1918), p. 25.
16 "Plan Books — The 1915 Way to Sell Lumber," *Western Lumberman*, Vol. 12, No. 8 (Aug. 1915), p. 18.

17 "The 1916 Model," *Western Lumberman*, Vol. 12, No. 5 (May 1915), p. 18.
18 "The Plan Book and Its Value to the Country Dealer," *Western Lumberman*, Vol. 12, No. 9 (Sept. 1915), p. 17.
19 "Annual Meeting of Retail Lumbermen," *Western Lumberman*, Vol. 14, No. 2 (Feb. 1917), p. 17; "WRLA Annual Meeting," *Western Lumberman*, Vol. 15, No. 2 (Feb. 1918), p. 23; "Annual Meeting, Western Retail Lumbermen's Association," *Western Lumberman*, Vol. 17, No. 2 (Feb. 1920), p. 48; "Issues New Plan Book," *Western Lumberman*, Vol. 17, No. 4 (April 1920), p. 50.
20 "The Old and the New Way of Furnishing Bills for Construction," *Western Lumberman*, Vol. 17, No. 5 (May 1920), p. 61; *also* untitled article, *Western Lumberman*, Vol. 15, No. 2 (Feb. 1918), p. 23. Enrolment in the first year of the course was 940 (180 were from the U.S.).
21 For example, "The Inglenook," *The Farmer's Advocate and Home Journal*, Vol. 53, No. 134 (5 June 1918), p. 956; "Farm House Plans," *The Nor'-West Farmer*, 5 April 1916, p. 411.
22 "The Value of the 'Service' Department," *Western Lumberman*, Vol. 14, No. 3 (March 1917), p. 14; "An Announcement of Great Interest to You," *Western Lumberman*, Vol. 16, No. 4 (April 1919), p. 26; *also* Glenbow Museum (Calgary). Archives, BB.IA"556, Crown Lumber Company catalogue of house and barn designs, n.d., n.p.
23 Britnell, *The Wheat Economy*, p. 76. For a contemporary assessment of this situation *see* "In the Realm of the Retail Lumber Dealer," *Western Lumberman*, Vol. 11, No. 2 (Feb. 1914), p. 49.
24 Gray, *The Roar of the Twenties*, p. 42.
25 "Permanent Buildings," *The Farmer's Advocate and Home Journal*, Vol. 49, No. 1146 (9 Sept. 1914), p. 1205.
26 The use of silos was introduced as a concept in western farm journals during the 1890s; initially, they were conceived of as a storage area that could be incorporated within the barn or as an annexed shed, rather than as free-standing structures. *See*, for example, "Have Silos Been a Success?," *The Farmer's Advocate and Home Journal*, Vol. 30, No. 380 (20 April 1895), p. 155.
27 David Spector, 'Animal Husbandry on the Canadian Prairies,' in "Agriculture on the Prairies, 1870–1940," *History and Archaeology*, No. 65 (1983) (hereafter cited as 'Animal Husbandry'), pp. 44, 46.
28 Western Retail Lumbermen's Association, *Plans for the Home Builder Obtainable From Your Home-Town Lumber Dealer* (Winnipeg: 1926) (hereafter cited as *Plans for the Home Builder*), p. 6.
29 Spector, 'Animal Husbandry,' pp. 50, 52–53.
30 Murchie, *Agricultural Progress on the Prairie Frontier*, p. 236.
31 "Service Building is Dealer's Byword," *Western Lumberman*, Vol. 17, No. 8 (Aug. 1920), p. 108. Instruction in marketing techniques included the following advice in the October 1921 issue of the *Western Lumberman*: "The constant, steady, pounding away will make a strong impression on the prospect's mind which will produce its own result by spring when the building season opens up...." *in* "Building Associations Help the Lumber Trade," *Western Lumberman*, Vol. 18, No. 10 (Oct. 1921), p. 34.
32 Adams, *Rural Planning and Development*, pp. 20, 26.
33 "In the Realm of the Retail Lumber Dealer," *Western Lumberman*, Vol. 11, No. 2 (Feb. 1914), p. 49.
34 "Farm Housing Demands More Consideration," *Western Lumberman*, Vol. 17, No. 7 (July 1920), pp. 53–54; *also* "Said the Retailer to the Manufacturer in B.C.," *Western Lumberman*, Vol. 17, No. 4 (April 1920), p. 55.

Mass Marketing's Impact on Prairie Farm Buildings

1 *See, for examples, The Nor'-West Farmer*, 20 Aug. 1920, p. 1183, advertisement of the Lumber Manufacturers of Western Canada, and "When are You going to Build that New Barn?," *The Saskatchewan Farmer*, Vol. 11, No. 5 (Feb. 1921), p. 18.

Part III
A Survey of Pre-1920 Houses, Barns, and Outbuildings

Bungalows

1 "A Bungalow [*sic*]," *Farm and Ranch Review*, 5 Feb. 1910, p. 82.

Square Houses

1 Thomas W. Hachett, "The Four Square House Type in the United States," in *Perspectives in Vernacular Architecture* (Annapolis: Vernacular Architecture Forum, 1982), pp. 51–53.

Barns

1 Glenbow Museum (Calgary). Archives. Canadian Pacific Railway Company, Dept. of Natural Resources, "Plans for Various Standard Structures" (Calgary: 1913).
2 "A Good Idea in Barn Building," *The Nor'-West Farmer*, April 1898, p. 144; "Basement Barns," *The Nor'-West Farmer*, Jan. 1895, p. 6.
3 Spector, 'Animal Husbandry,' pp. 42–46; David Butterfield and Edward Ledohowski, *Architectural Heritage: The MSTW Planning District* (Winnipeg: Manitoba Dept. of Cultural Affairs and Historic Resources, 1984), pp. 65–69; L.R. Miller, ed. *The Complete Barn Book* (Eugene, Ore.: Mill Press, 1983).
4 "Barn Building on the Average Farm," *The Farmer's Advocate and Home Journal*, Vol. 50, No. 1184 (2 June 1915), p. 664.
5 Western Retail Lumbermen's Association, *Plans for the Home Builder*, p. 65.
6 "Plan for an Octagonal Barn," *Western Lumberman*, Vol. 5, No. 1 (Jan. 1908), p. 19; Leslie J. Smith, "Round Barns," in Leslie J. Smith and Robert Milne, *Plans for Farm Buildings* (Winnipeg: Manitoba Dept. of Agriculture and Immigration, 1913), pp. 15–22.

Granaries and Implement Sheds

1 Milo Smith Ketchum, *The Design of Walls, Bins and Grain Elevators* (New York: McGraw-Hill, 1913); British Columbia Dept. of Lands. Forest Service, *Implement Sheds and Granaries* (Victoria: William H. Cullin, King's Printer, 1915); Dr. Paul Voisey, Univ. of Alberta, personal correspondence, 15 Sept. 1986.
2 "General Farm Implement Shed," *The Nor'-West Farmer*, 5 Feb. 1918, p. 136; British Columbia Dept. of Lands. Forest Service, *Implement Sheds and Granaries*, (Victoria: William H. Cullin, King's Printer, 1915).

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"Better Rural Homes." Vol. 14, No. 9 (Sept. 1917), p. 21.
"Getting Results With the Telephone." Vol. 14, No. 10 (Oct. 1917), p. 34.
"Why the Silo Has Come to Stay." Vol. 14, No. 10 (Oct. 1917), p. 43.
"Three Big Questions Before Retail Trade Today." Vol. 14, No. 11 (Nov. 1917), p. 21.
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"Farmers Will Need More Granaries." Vol. 15, No. 8 (Aug. 1918), p. 27.
"Early Troubles of the Lumber Dealers." Vol. 15, No. 9 (Sept. 1818), pp. 42–43.
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"An Announcement of Great Interest to You." Vol. 16, No. 4 (April 1919), p. 26.
"A Typical Prairie Barn." Vol. 16, No. 4 (April 1919), p. 27.
"A Handsome Barn — The Manitoba." Vol. 16, No. 6 (June 1919), p. 27.
"What Sort of Chap is He: Does He Own a Home?" Vol. 16, No. 8 (Aug. 1919), pp. 38–39.
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"Keeping Tight Grip on the Prairie Market." Vol. 16, No. 11 (Nov. 1919), p. 24.
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